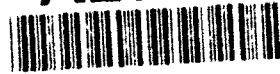


AD-A269 816



①

WL-TR-93-3045



**LIFT AND PITCHING MOMENT INDUCED ON JET STOVL  
AIRCRAFT BY THE GROUND VORTEX - DATA REPORT**

**Vearl R. Stewart**  
**Richard E. Kuhn**  
*KSA Technology*  
*5689 Plum Orchard Drive*  
*Columbus, Ohio 43213*

**JUNE 1993**  
**FINAL REPORT FOR PERIOD MAY 1990 - MAY 1993**

**DTIC**  
**ELECTE**  
**SEP 27 1993**  
**S E D**

**APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED**

**FLIGHT DYNAMICS DIRECTORATE**  
**WRIGHT LABORATORY**  
**AIR FORCE MATERIEL COMMAND**  
**WRIGHT PATTERSON AIR FORCE BASE, OHIO 45433-7562**

**93-22253**



10001

88 3 34 073

## NOTICE

*When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely Government-related procurement operation, the United States Government thereby incurs no responsibility nor any obligation whatsoever; and the fact that the government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data, is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture use, or sell any patented invention that may be any way related thereto.*

*This report is releasable to the National Technical Information Service (NTIS). At NTIS, it will be available to the general public, including foreign nations.*


*This technical report has been reviewed and is approved for publication.*



**WILLIAM B. BLAKE**  
Project Engineer  
Control Dynamics Branch  
Flight Control Division



**FRANK R. SWORTZEL, Chief**  
Control Dynamics Branch  
Flight Control Division



**DAVID P. LEMASTER, Chief**  
Flight Control Division  
Flight Dynamics Directorate

*If your address has changed, if you wish to be removed from our mailing list, or if the addressee is no longer employed by your organization please notify WL/FIGC, 2210 Eighth St Ste 21, Wright-Patterson Air Force Base, OH 45433-7531 to help us maintain a current mailing list.*

*Copies of this report should not be returned unless return is required by security considerations, contractual obligations, or notice on a specific document.*

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
<small>Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.</small>				
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE JUN 1993	3. REPORT TYPE AND DATES COVERED FINAL 05/01/90 -- 05/01/93		
4. TITLE AND SUBTITLE  LIFT AND PITCHING MOMENT INDUCED ON JET STOVL AIRCRAFT BY THE GROUND VORTEX - DATA REPORT		5. FUNDING NUMBERS  CONTRACT: F33615-89-C-3611		
6. AUTHOR(S)  V.R. STEWART, R.E. KUHN		PE 65502 WU 30054073		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)  KSA TECHNOLOGY 5689 PLUM ORCHARD DRIVE COLUMBUS OH 43213		8. PERFORMING ORGANIZATION REPORT NUMBER  KSA 92-1		
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)  FLIGHT DYNAMICS DIRECTORATE WRIGHT LABORATORY AIR FORCE MATERIEL COMMAND WRIGHT PATTERSON AFB OH 45433-7562		10. SPONSORING / MONITORING AGENCY REPORT NUMBER  WL-TR-93-3045		
11. SUPPLEMENTARY NOTES				
12a. DISTRIBUTION / AVAILABILITY STATEMENT  APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED.		12b. DISTRIBUTION CODE		
13. ABSTRACT (Maximum 200 words)  THE DATA OBTAINED DURING AN INVESTIGATION OF THE EFFECTS OF THE GROUND VORTEX ON A GENERIC WING-BODY CONFIGURATION ARE PRESENTED IN THIS REPORT. CIRCULAR, RECTANGULAR AND THRUST REVERSER JETS WERE TESTED. THE TESTS WERE CONDUCTED IN THE 14 BY 22 FOOT TUNNEL AT THE NASA LANGLEY RESEARCH CENTER. THE TESTS COVERED A RANGE OF HEIGHTS ABOVE THE GROUND, FORWARD VELOCITIES, AND GROUND BELT SPEEDS.				
14. SUBJECT TERMS  AERODYNAMICS, GROUND EFFECT, GROUND VORTEX, MOVING GROUND BELT			15. NUMBER OF PAGES 106	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT  UNCLASSIFIED	18. SECURITY CLASSIFICATION OF THIS PAGE  UNCLASSIFIED	19. SECURITY CLASSIFICATION OF ABSTRACT  UNCLASSIFIED	20. LIMITATION OF ABSTRACT  UL	

# TABLE OF CONTENTS

	PAGE #
TABLE OF CONTENTS	iii
LIST OF FIGURES	iv
LIST OF TABLES	vii
SYMBOLS	viii
INTRODUCTION	1
BACKGROUND	1
NEW PROGRAM	2
MODEL	2
TEST PROGRAM	3
REFERENCES	8

Accession For	
NTIS CRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification .....	
By .....	
Distribution /	
Availability Codes	
Dist	Avail and/or Special
A-1	

PROPERTY INSPECTED 1

# LIST OF FIGURES

FIGURE #	TITLE	PAGE #
1	Generic Model Two View	9
2	Wing Planforms Tested	10
3	Nozzle Shapes Tested	11
4	Generic STOL Model Wind Tunnel Installation	12
5	Nozzle Calibration Installation	13
6	Flow Visualization Installation with Floor Grid	13
7	Wind Tunnel Installation for the Flow Visualization Tests	14
8	Flow Visualization Residue on Floor	15
9	Sample Flow Visualization on TV Screen	15
10	Delta Wing Model with Circular Jet at FS 12	16
11	Generic Stol Model with Basic Wing at FS 10, Rectangular Nozzle at FS 24, Config BR24W10	16
12	Generic Stol Model with Flapped Wing at FS 10, Rectangular Nozzle at FS 24, Config BR24W10F	17
13	Generic Stol Model with Swept Wing at FS 14 Thrust Reverser Nozzle at FS 24, Config BTR24W10	17
14	Ground Vortex Penetration, Circular Nozzle, $V_b/V_o=0$	18
15	Ground Vortex Penetration, Circular Nozzle, $V_b/V_o=1.0$	19
16	Ground Vortex Penetration, Rectangular Nozzle, $V_b/V_o=0$	20
17	Ground Vortex Penetration, Rectangular Nozzle, $V_b/V_o=1.0$	21
18	Ground Vortex Penetration, thrust reverser Nozzle, $V_b/V_o=0$	22
19	Ground Vortex Penetration, thrust reverser Nozzle, $V_b/V_o=1.0$	23

# LIST OF FIGURES (CONT.)

FIGURE #	TITLE	PAGE #
20	Variation of Aerodynamic Characteristics with Angle of Attack, Circular nozzle, $V_e=0$	24
21	Variation of Aerodynamic Characteristics with Angle of Attack, Circular Nozzle $V_e=0.1$	25
22	Variation of Aerodynamic Characteristics with Height, BC24, $V_b/V_o=0$	26
23	Variation of Aerodynamic Characteristics with Height, BC24, $V_b/V_o=1.0$	27
24	Variation of Aerodynamic Characteristics with Height, BC24W10, $V_b/V_o=0$	28
25	Variation of Aerodynamic Characteristics with Height, BC24W10, $V_b/V_o=1.0$	29
26	Variation of Aerodynamic Characteristics with Height, BC24W14, $V_b/V_o=0$	30
27	Variation of Aerodynamic Characteristics with Height, BC24W14, $V_b/V_o=1.0$	31
28	Variation of Aerodynamic Characteristics with Height, BC24W18, $V_b/V_o=0$	32
29	Variation of Aerodynamic Characteristics with Height, BC24W18, $V_b/V_o=1.0$	33
30	Variation of Aerodynamic Characteristics with Angle of Attack, Rectangular Nozzle, $V_e=0$	34
31	Variation of Aerodynamic Characteristics with Angle of Attack, Rectangular Nozzle, $V_e=0.1$	35
32	Variation of Aerodynamic Characteristics with Height, BR24, $V_b/V_o=0$	36
33	Variation of Aerodynamic Characteristics with Height, BR24, $V_b/V_o=1.0$	37
34	Variation of Aerodynamic Characteristics with Height, BR24W10, $V_b/V_o=0$	38

# LIST OF FIGURES (CONT.)

FIGURE #	TITLE	PAGE #
35	Variation of Aerodynamic Characteristics with Height, BR24W10, $V_b/V_o=1.0$	39
36	Variation of Aerodynamic Characteristics with Height, BR24W14, $V_b/V_o=0$	40
37	Variation of Aerodynamic Characteristics with Height, BR24W14, $V_b/V_o=1.0$	41
38	Variation of Aerodynamic Characteristics with Height, BR24W18, $V_b/V_o=0$	42
39	Variation of Aerodynamic Characteristics with Height, BR24W18, $V_b/V_o=1.0$	43
40	Variation of Aerodynamic Characteristics with Angle of Attack, Thrust Reverser Nozzle, $V_e=0$	44
41	Variation of Aerodynamic Characteristics with Angle of Attack, Thrust Reverser Nozzle, $V_e=0.1$	45
42	Variation of Aerodynamic Characteristics with Height, BTR24, $V_b/V_o=0$	46
43	Variation of Aerodynamic Characteristics with Height, BTR24, $V_b/V_o=1.0$	47
44	Variation of Aerodynamic Characteristics with Height, BTR24W10, $V_b/V_o=0$	48
45	Variation of Aerodynamic Characteristics with Height, BTR24W10, $V_b/V_o=1.0$	49
46	Variation of Aerodynamic Characteristics with Height, BTR24W14, $V_b/V_o=0$	50
47	Variation of Aerodynamic Characteristics with Height, BTR24W14, $V_b/V_o=1.0$	51
48	Variation of Aerodynamic Characteristics with Height, BTR24W18, $V_b/V_o=0$	52
49	Variation of Aerodynamic Characteristics with Height, BTR24W18, $V_b/V_o=1.0$	53

## LIST OF TABLES

TABLE #	TITLE	PAGE #
1	Generic STOL Model Geometry	3
2	Genetic Model Test Conditions	4
3	Configuration Key	54
4	Run Schedule	54
5	Tabulated Data - Ground Vortex	61



# SYMBOLS

$A_j$	Total jet exit area	sq. ft.
ALPHA	Angle of Attack	deg.
AOA	Angle of attack	deg.
AR	wing aspect ratio	$b^2/S$
b	Wing span,	ft.
c	Reference chord	ft.
c	Mean Aerodynamic Chord (MAC)	ft.
$C_D$	Drag coefficient, Aerodynamic,	$D/QS$
$C_L$	Lift coefficient, Aerodynamic,	$L/QS$
$C_m$	Pitching moment coef. Aerodynamic,	$M/QSc$
$C_T$	Thrust coefficient	$T/QS$
d	Jet diameter	ft.
$D_e$	Equivalent diameter of planform area	ft.
$d_e$	Equivalent diameter of total jet area,	ft.
$d_e$	Effective Jet Diameter	$4A_j/\pi$
$f_p$	Planform fineness ratio	
H, h	Height Above Ground	ft.
NPR	Jet nozzle pressure ratio	
Q	Free stream dynamic pressure	psf
$Q_j$	Jet Dynamic Pressure	psf
r	Radial distance from center of jet	ft.
S	Planform area	sq. ft.
$S_w$	Wing area	sq. ft.
$S_{w \text{ exp}}$	Exposed wing area	sq. ft.
$S_h$	Horizontal Tail Area	sq. ft.
$S_c$	Canard Area	sq. ft.

# SYMBOLS (CONT.)

T	Total jet thrust	lb.
$V_b$	Belt Velocity	ft./sec.
$V_e$	Effective Velocity Ratio	$\sqrt{Q/Q_j}$
$V_j$	Jet Velocity	ft./sec.
$V_o$	Free Stream Velocity	ft./sec.
$w_f$	Fuselage Width	ft.
x	Longitudinal station; positive aft	ft.
$x_e$	Effective arm of lift increment; pos. fwd.	ft.
$x'$	Penetration of the Ground Vortex	ft.
$x_v$	Distance to Maximum Pressure	ft.
y	Lateral station	ft.
$\Delta$	Thrust Deflection	deg.
$\alpha$	Angle of Attack	deg.

## INTRODUCTION

The objective of the reported program is the development of an improved methodology for estimating the aerodynamic characteristics of various STOL deflected thrust configurations in ground effect. The areas of the investigation included the fountain developed by multiple jets and the ground vortex created by a single jet impinging on the ground at forward speeds. In order to assess the requirements for this problem, Phase I of the program investigated the existing data base. The data base existing at that time was found to be inadequate in providing test data of several important parameters for STOL configurations with jets impinging on the ground. The effect of ground boundary layer on the ground vortex was not adequately defined and the effect of forward speed on the fountain has not been adequately defined.

The data for the studies directed at solutions for the multiple jet fountain effects are presented in References 1 and 2. Reference 1 presents the studies of the fountain in hover performed on the small scale hover rig at NASA Ames Research Center and Reference 2 presents the data for the fountain effects performed at forward speeds and conducted in the 14-by-22-ft subsonic wind tunnel at NASA, Langley Research Center. The tests and data for the ground vortex studies are also conducted in the 14-by-22-ft subsonic wind tunnel are presented and discussed in this report.

The effect of the ground proximity on the STOL airplane aerodynamic characteristics have been shown to be the sum of several inputs. In the case of a single jet configuration, the inflow into the jet results in a suck down and a ground vortex can be created which can have a significant effect on the aerodynamic characteristics of the STOL airplane. This test program was developed to investigate the ground effect of a generic jet STOL configuration. The effect of significant configuration variables on the aerodynamic characteristics was investigated in close ground proximity. Little was known about the effect of the ground boundary layer created by the air flow in the wind tunnel testing. Also, most of the existing data was obtained in wind tunnels and in many cases, the effect of wing configuration and location relative to the jets had not been adequately investigated. Recent configurations design have proposed the use of rectangular nozzles with deflected thrust and thrust reversers and little development data were available for these concepts. A test program to investigate these parameters has been made during this study. This appendix discusses the model, test program, and test variables performed in response to the requirements.

The results of the analysis and method development utilizing these data are presented in References 3 and 4. Reference 3 presents the results and methods developed from the generic model

Reference 4 presents the results and methods from the fountain studies from the analysis of the data in References 1 and 2.

## BACKGROUND

A prime contributor to the change in the aerodynamic characteristics due to near proximity to the ground is the ground vortex discussed in several of the references, see References 5 through 12 for examples. The extent of the penetration of the ground vortex into the free stream appears to be the cause of these changes to the characteristics. One of the variables to be investigated during this study was the effect of the ground boundary layer on the aerodynamic characteristics. Previous studies had assumed that vortex of the thick jet from a deflected nozzle would not be measurably effected by the ground boundary layer. Moving model tests to investigate the ground vortex, first by Abbott, Reference 9, and later by NASA, reported by Stewart, Reference 10, showed that the ground vortex penetration into the free stream was reduced considerable in the case of the moving model when compared to the more common test data with a stationary model and ground board. The effects of this vortex penetration reduction on the aerodynamic characteristics was not known. Much has been known of the effect of a moving ground belt on the aerodynamic characteristics of jet flap configurations but these requirements had not been extended to deflected thrust configurations.

Most of the existing data base for deflected thrust configurations had been obtained in conjunction with hover suckdown studies. The configuration for these utilized, in many cases, a plate at the nozzle exit to determine the suckdown rather than an airplane configuration, or, in some cases a specific airplane configuration with no development of the STOL configuration was tested to determine the ground effects. Although these data are useful, it is difficult to develop generic methods from such isolated data. The plate approach results in little or no circulation lift on that plate, this resulted in a prediction of excessive lift loss. The specific configuration data approach leaves little ability to extrapolate the configuration variables.

## NEW PROGRAM

Therefore, the purpose of this program was determine if the ground boundary layer affected the vortex and, if so, did the change to the vortex affect the incremental aerodynamic characteristics. A model was fabricated and a test program developed to determine the longitudinal aerodynamic characteristics of a generic STOL configuration. The model and the test program were designed to provide generic test data to investigate the effects of the vortex and the configuration on the aerodynamic characteristics. The nozzle configuration and the lifting surface configuration were variables. The test program was to systematically vary the model and test variables to cover a significant range of appropriate flight conditions.

## MODEL

The generic STOL model fabricated for the ground vortex study is shown in Figure 1. The high pressure air for the nozzles is supplied to the model through the NASA air sting. The plenum provides a box to supply three nozzle locations as shown in the figure. Distribution within the plenum is determined by a supply tube within the plenum. The supply tube has a series of holes exhausting away from the nozzle mounting brackets. The model body is a box arrangement with an ogive nose. The rectangular box provides a shield for the internal balance and as a mounting for the low wings. The wings are Plexiglas designed to allow flow visualization of the ground vortex. Three wings, Figure 2, were fabricated and tested. All wings were untapered and had an aspect ratio of 4. The wings were; 1. a straight, unflapped wing, 2. a straight wing with a  $30^\circ$  flap, and 3. a unflapped,  $30^\circ$  swept wing. The model was mounted to the air supply plenum by the internal balance. The nozzles, Figure 3, were mounted to the plenum and projected through the fuselage bottom with an air clearance. This provided for the recording of the aerodynamic forces on the model shell. Total forces, aerodynamic plus thrust forces, were measured on an external balance which also served to mount the entire model to the NASA air sting. The model was tested in the NASA, Langley Research Center 14-by-22-ft subsonic wind tunnel. Figure 4 shows the model and the mounting the wind tunnel air sting.

The model fuselage and plenum shown in Figure 1 provides variations in nozzle and wing locations. Three nozzles were fabricated for the study. As seen in Figure 3, the nozzles are 1. a circular nozzle with a diameter of 1.2 inches, 2. a rectangular nozzle with an aspect ratio of 3, and 3. a thrust reverser nozzle composed of two aspect ratio nozzles deflect  $30^\circ$  forward of the perpendicular. All nozzles had the same exit areas. Each of these nozzles could be mounted at three longitudinal locations, FS 12, FS 20, and FS 24. The wings were mounted as low wings with their lower mold line at the fuselage bottom. Any wing could be mounted with the leading edge at FS 10, FS 16, and FS 18 and with any nozzle located at any position. Clearance was provided in each wing for the nozzle assemblies to be mounted at four inch increments along the plenum. These combinations provided the capability of generic configurations variations of nozzle variation from well ahead of the wing to well aft of the wing. Not all possible variations were utilized during this test. The nozzles were tested at Fuselage station 24 only. In most cases the wings were tested at all possible wing positions. Model geometry and data reduction parameters are presented in Table 1.

Table 1. Generic STOL Model Geometry

Wing

Chord	6.75 Inches	0.5625 Feet
Span	27.00 Inches	2.25 Feet
Area	182.25 In. <sup>2</sup>	1.2653 Ft <sup>2</sup>
Aspect Ratio	4.00	
Mean Aero. Chord	6.75 Inches	0.5625 Feet

Body

Height Maximum	7.00 Inches	0.583 Feet
Width	5.00 Inches	0.417 Feet
Length	26.00 Inches	2.176 Feet

Data Moment Center for Tabulated moment data, Table 5

Fuselage Station	16
Waterline	0
Lower surface of fuselage and wing	

### TEST PROGRAM

The circular and rectangular nozzles had been calibrated during the hover testing done at NASA Ames Research center and reported in Reference. The circular and rectangular nozzles were checked calibrated and the thrust reverser nozzle calibrated on the model as shown in Figure 5. The calibration set up shown is with two circular nozzles and was used to provide balanced front and rear flow for the fountain study. Each nozzle was calibrated on this setup. The exit flow was measured on the total pressure rakes shown in the figure. The centerline pressure distribution was measured and compared to that measured a NASA Ames. This measurement verified that the plenum arrangement was satisfactory and that the calibration from NASA Ames was valid.

As stated a test program to provide data on as many of the important parameters as possible was developed. All test programs are limited by time and equipment capabilities. The NASA wind tunnel is equipped with a moving ground belt. The maximum belt speed permissible is 100 feet per second. This maximum speed set the tunnel velocity and the nozzle pressure ratio which could be utilized. The moving belt was required to determine the effect of the ground boundary on the ground vortex

determine the effect of the ground boundary on the ground vortex and ultimately on the aerodynamic characteristics. All data obtained during the test of the generic model were obtained at a maximum speed of 100 feet per second to correspond with belt speed. Table 2 presents the test conditions.

Table 2. Generic Model Test Conditions

VELOCITY RATIO $V_o/V_j$	TUNNEL VELOCITY FT./SEC.	BELT SPEED FT./SEC.	NOZZLE PRESSURE RATIO
INFINITY	100	0, 100	1.00
0.05	50	0, 50	1.65
0.10	100	0, 100	1.65
0.15	100	0, 100	1.26
0.20	100	0, 100	1.14

The ground vortex was measured by the use of a flow visualization technique. A visible smoke was ejected along the ground on the extended centerline of the model and nozzles but well ahead of the model. The smoke formed a sheet of visible flow just above the ground boundary layer. This sheet was interrupted by wall jet formed by the nozzle flow. The wall jet forms the ground vortex as it is stopped by the oncoming free stream and turned back onto itself. The void in the smoke sheet resulting from the displacement of that smoke sheet defines the extent of the ground vortex. The vortex penetration was measured by recording the smoke on a TV camera and superimposing a grid on the screen to view the vortex.

Figure 6 shows the model and the floor grid for the vortex penetration portion of the study. The nozzle is moved to the most forward location on the plenum and the model fuselage and wing are removed to reduce any interference from the model. The model and grid which was superimposed on the screen to read the vortex penetration are shown in Figure 6. The grid was removed during the flow studies. Figure 7 presents the model installation. Figure 8 shows a typical vortex formed on the ground. This pictured vortex was the formed by the ground vortex during setup and testing of the circular jet with the belt stopped for the entire running time. The vortex pattern seen is the residual smoke deposited on the tunnel floor. The residual would represent the point of the vortex leading edge. Data for each of the nozzles were obtained through a range of velocity ratios and heights above the ground with the belt moving at the free stream velocity and with the belt stationary. These data which were obtained from reading the video tapes with the grid superimposed on the screen are discussed in Reference 11. Figure

condition.

The primary configuration for the investigation of the aerodynamic characteristics was the generic model discussed above. An all wing model was also available for testing in the 14-by-22-ft tunnel for the multiple jet fountain effects portion of the study, see Reference 1 and 2. The delta wing model is shown in Figure 10. The model was tested with belt stationary only and the data are presented in Reference 2.

Aerodynamic data for the generic model were obtained through the range of velocity ratios and heights for all wing configurations and at various wing positions. These data were obtained with belt speeds equal to the free stream flow and with the belt stationary. The tunnel installation is shown in Figure 4. Model forces were measured on both balances. The forces on the shell were recorded on the internal balance with the nozzle forces off the balance and isolated by an air gap at each nozzle. The total forces, shell and thrust were measured by the external balance. Figures 11, 12, and 13 show the generic STOL model mounted in the NASA test section with the several wing configurations and locations. The model with the straight wing is shown in Figure 11, Figure 12 shows the flapped wing, and the swept wing with the thrust reverser nozzle is shown in Figure 13.

The test procedure used in the 14-by-22-ft wind tunnel to determine the ground vortex penetration depended upon the accuracy of the smoke generation and the reading of the video pictures. In order to verify this the accuracy of this procedure, a split ground belt with a row of pressure instrumentation along the jet centerline was fabricated. This split belt was fabricated for operation in the NASA subsonic basic research wind tunnel. This facility has a test section of approximately two feet by three feet. The maximum design belt speed was 100 feet per second, this appears to be a reasonable belt limit at which belt tracking and data acquisition are adequate. The test with the split belt provided verification of the flow visualization procedures described above. A 0.6 inch diameter nozzle identical to that tested in the vortex research facility and described in Reference 10 was tested in the facility with the split belt operating and stationary. Data were obtained at a height of three diameters above the split belt and for a range of belt speeds at a velocity ratio of 0.10 and for stationary belt and equal to free stream for velocity ratios of approximately 0.05 and 0.15. This split belt was fabricated for operation in the NASA subsonic basic research wind tunnel. This facility has a test section of approximately two feet by three feet. The maximum design belt speed was 100 feet per second, this appears to be a reasonable belt limit at which belt tracking and data acquisition are adequate. The test with the split belt provided verification of the flow visualization procedures described above. A 0.6 inch diameter nozzle identical to that tested in the vortex research facility and described in Reference 8 was tested in the facility with the split belt operating and



8 was tested in the facility with the split belt operating and stationary. Data were obtained at a height of three diameters above the split belt and for a range of belt speeds at a velocity ratio of 0.10 and for stationary belt and equal to free stream for velocity ratios of approximately 0.05 and 0.15. The ground vortex penetration data was measured utilizing the centerline pressures and compared to the penetration of the vortex as determined from the flow visualization recordings at several heights from free air to near ground proximity with and without the moving belt. These results and data are presented and discussed in Appendix C to Reference 3.

The plotted results of the ground vortex study in the 14-by-22-ft subsonic wind tunnel through the use of the visible smoke flow visualization are presented in Figures 14 through 19. The vortex penetrations as determined by the flow visualization are presented in Figures 14 and 15 for the circular nozzle for the ground belt at speeds of zero and equal to the free stream velocity respectively. Comparable data are presented for the Rectangular, aspect ratio 3, nozzle in Figures 16 and 17 and for the thrust reverser nozzle in figures 18 and 19.

The test force data results are presented in this report. Plotted lift and pitching moment coefficient data are presented in Figures 20 through 49 for the unswept wing configuration. Figures 20 through 29 presents the circular nozzle aerodynamic characteristics. Figure 20 and 21 present angle of attack data for power off and power on ( $V_e=0.10$ ) respectively. Effects of height above the ground are presented in Figures 22 through 29 for various wing locations at all test conditions of velocity ratio and belt speeds. Figures 30 to 39 and 40 to 49 present comparable data for the rectangular and thrust reverser nozzles respectively.

Tabulated force data for all data runs are presented in Table 5. The configuration key is presented in Table 3 and the run schedule is presented in Table 4.

## REFERENCES

1. Wardwell, D.A.; "Jet-Induced Ground Effects on a Parametric Flat-Plate Model in Hover", NASA TM 104001, March 1993.
2. Kuhn, R.E. and Stewart, V.R.,; "Lift and Pitching Moment Induced on Jet STOVL Aircraft Hovering in Ground Effect - Data Report", Wright Laboratory TR-93-3044, June 1993
3. Stewart, V.R. and Kuhn, R.E., "Estimation of Lift and Pitching Moment Induced on Jet STOVL Aircraft by the Ground Vortex", Wright Laboratory TR-93-3061, August 1993
4. Kuhn, R.E. and Stewart, V.R.,; "Lift and Pitching Moment Induced on Jet STOVL Aircraft Hovering in Ground Effect" Wright Laboratory TR-93-3046, August 1993
5. Colin, P.E. and Olivari, D.; "The Impingement of a Circular Jet Normal to a Flat Surface with and without Cross Flow", von Karman Institute for Fluid Dynamics, Rhode-St.; Genese, Belgium, Rpt. AD688953, Jan. 1969.
6. Schwanties, E.; "The Recirculation Flow Field of a VTOL Lifting Engine", NASA TT F-14912 June 1973.
7. Weber, H.A. and Gay, A.; "VTOL Reingestion Model Testing of Fountain Control and Wind Effects", Prediction Methods for V/STOL Propulsion Aerodynamics, Vol. 1, Naval Air Systems Command, 1975, pp 358-380.
8. Cimbala, J. M., Billet, M. L., Gaublonne, D. P., "Experiments on the Unsteady Ground Vortex", NASA CR 177566, August 1990.
9. Abbott, W.A.; "Studies of Flow Fields Created by Vertical and Inclined Jets Moving over a Horizontal Surface", ACR Cp No. 911, 1967.
10. Stewart, V.R.; "An Experimental Investigation of the Ground Vortex Created by a Moving Jet", NASA CR-181841, July 1989
11. Stewart, V.R. and Blake, W.E., "A Study of the Effect of a Moving Ground Belt on the Vortex Created by a Jet Impinging on the Ground in a Cross Flow" AIAA Paper 92-4250, August 1992.

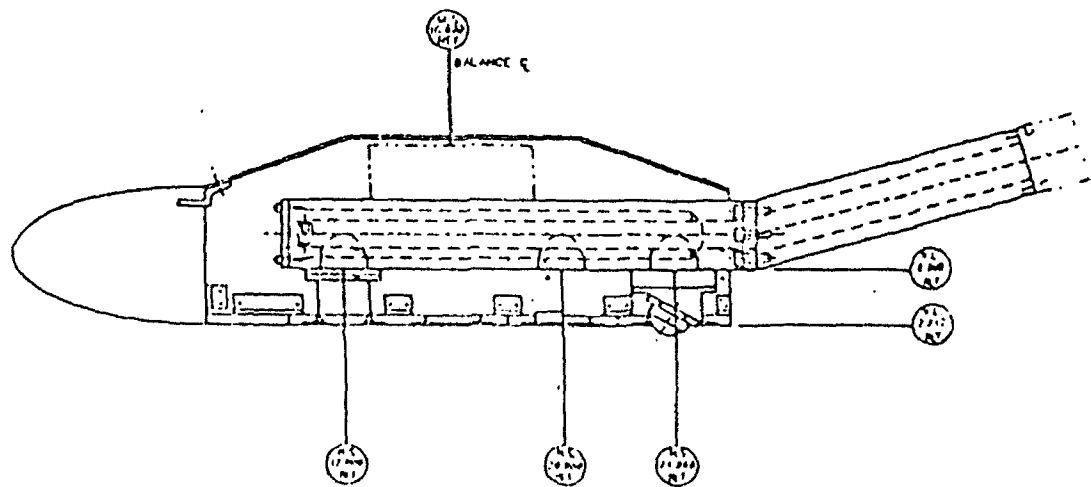
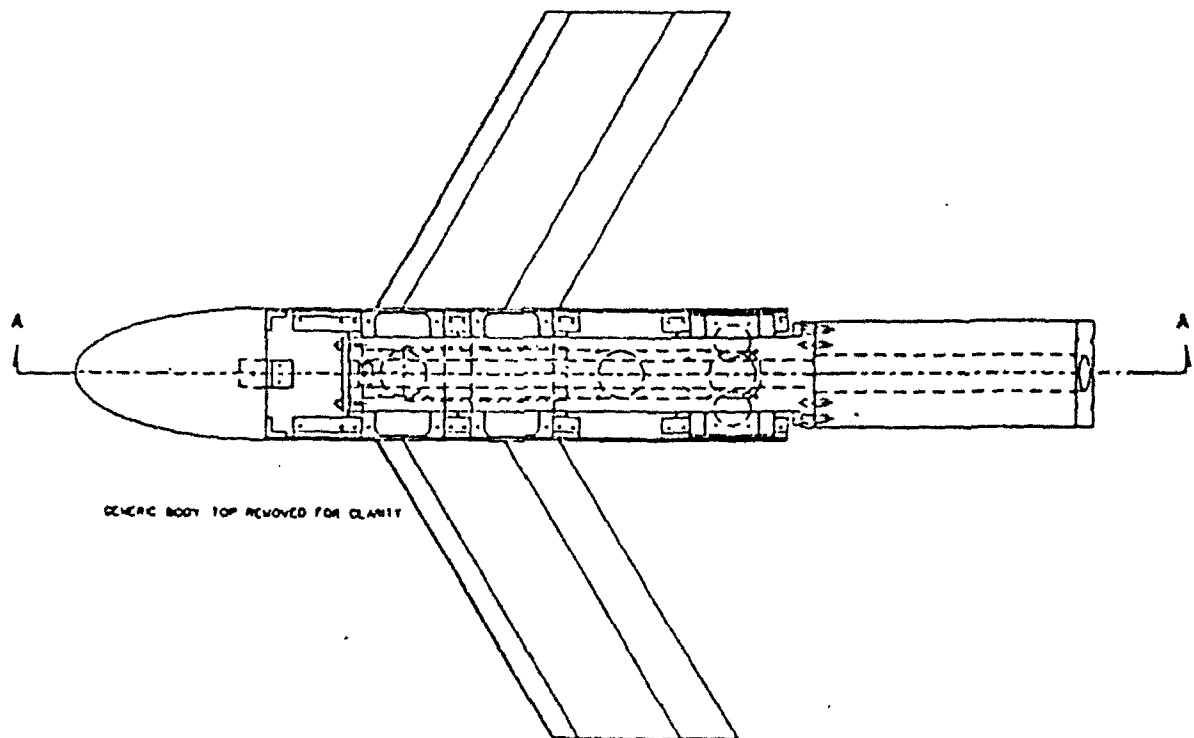


Figure 1. Generic Model Two View

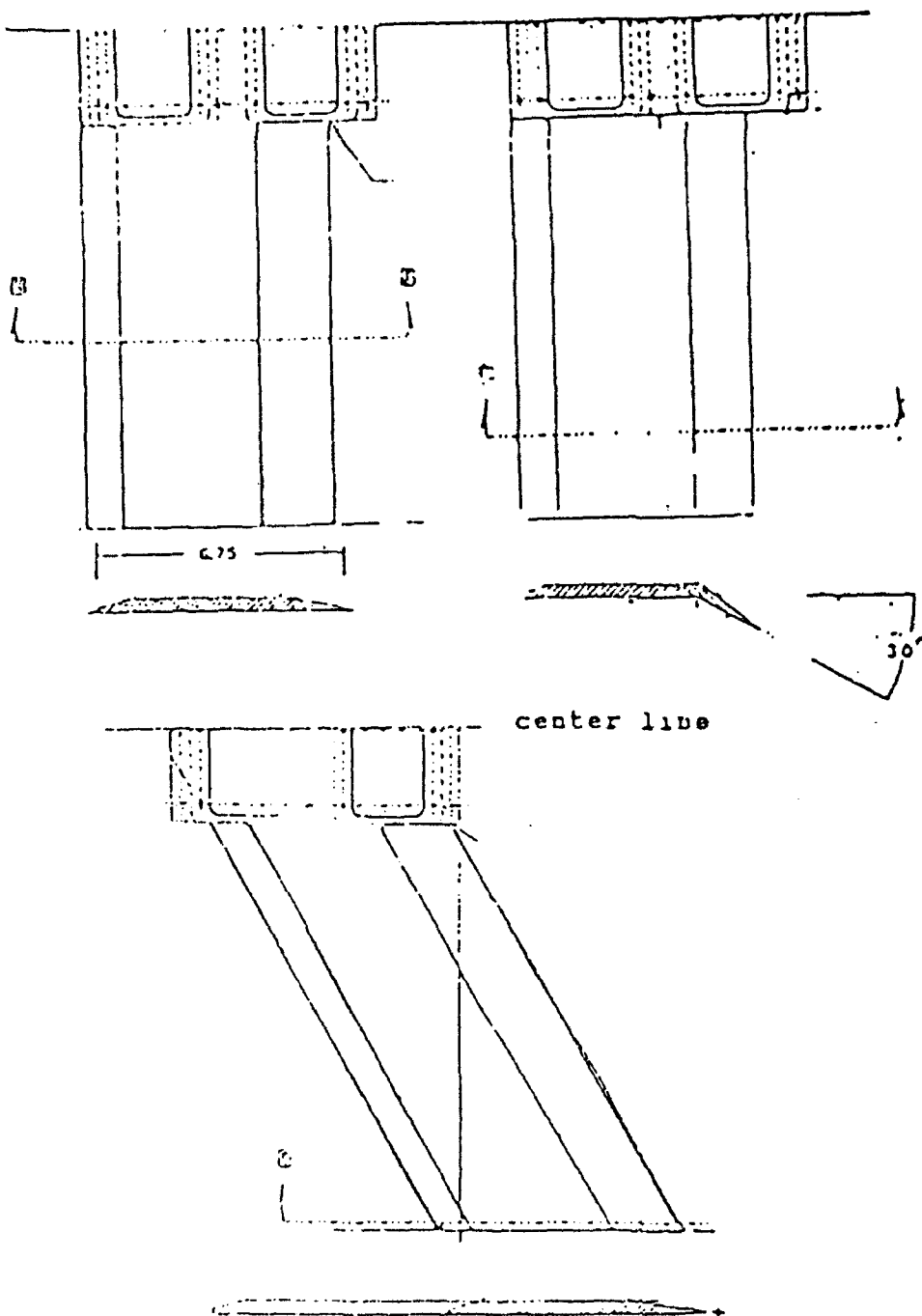


Figure 2. Wing Planforms Tested

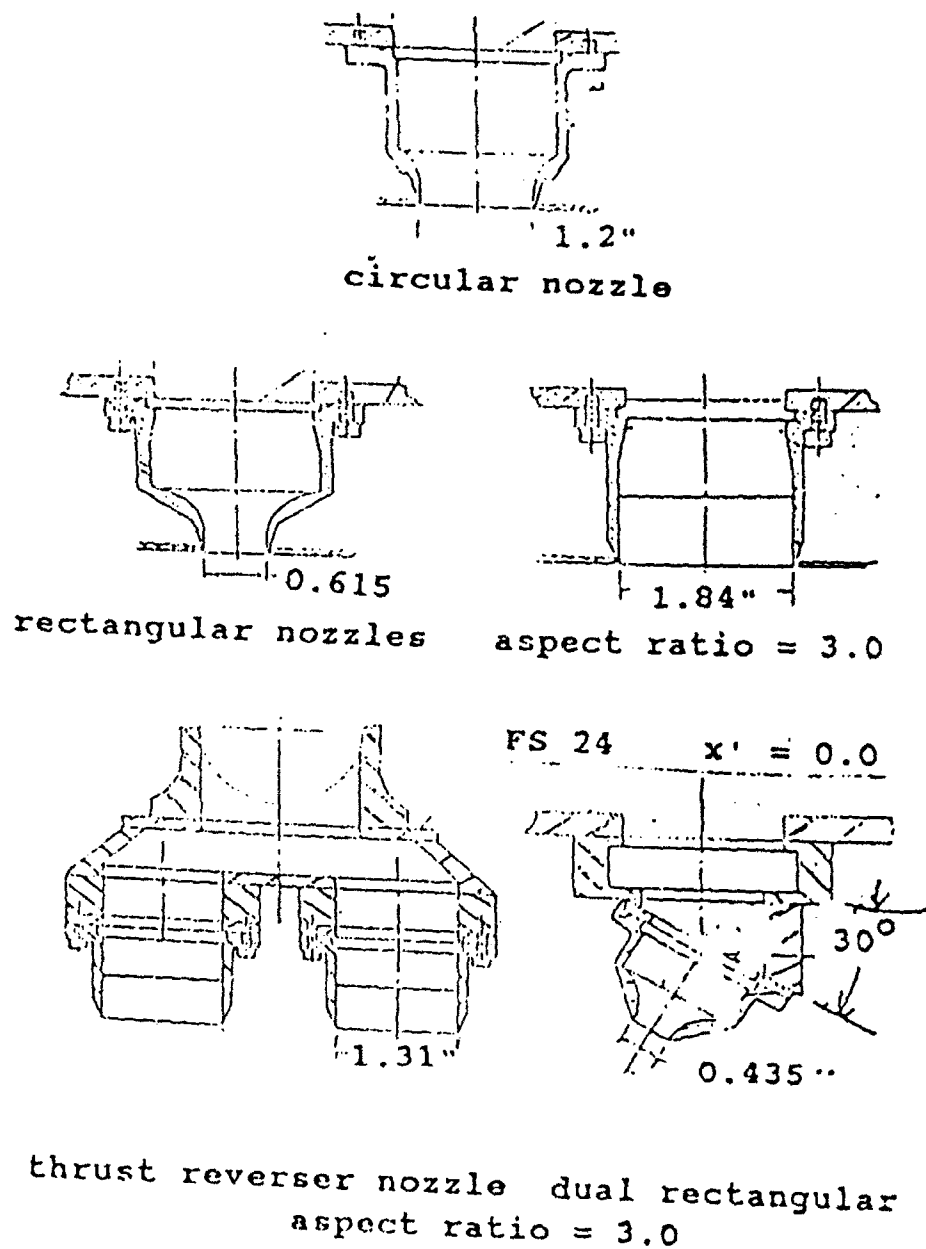


Figure 3. Nozzle Shapes Tested

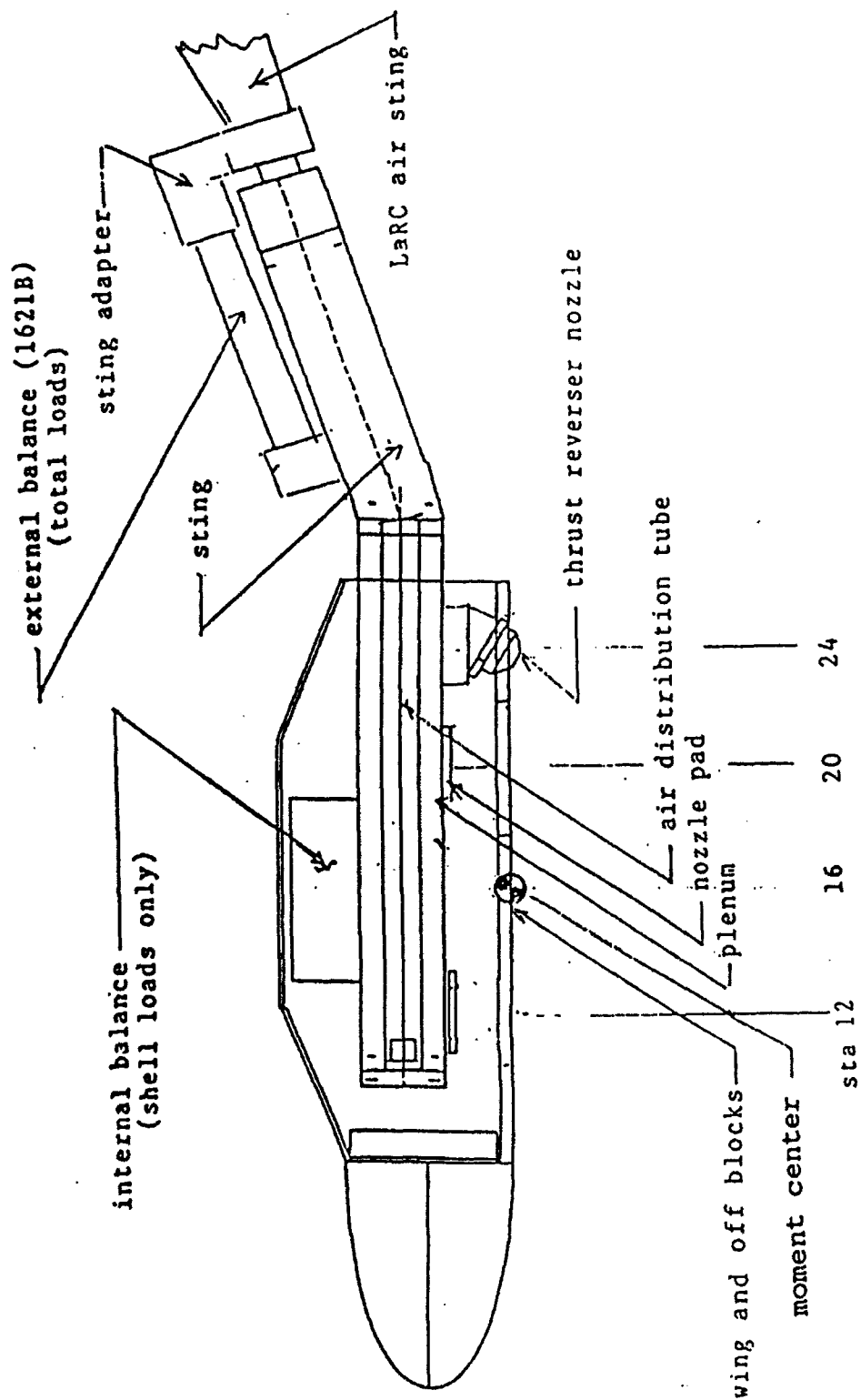


Figure 4. Generic STOL Model Wind Tunnel Installation

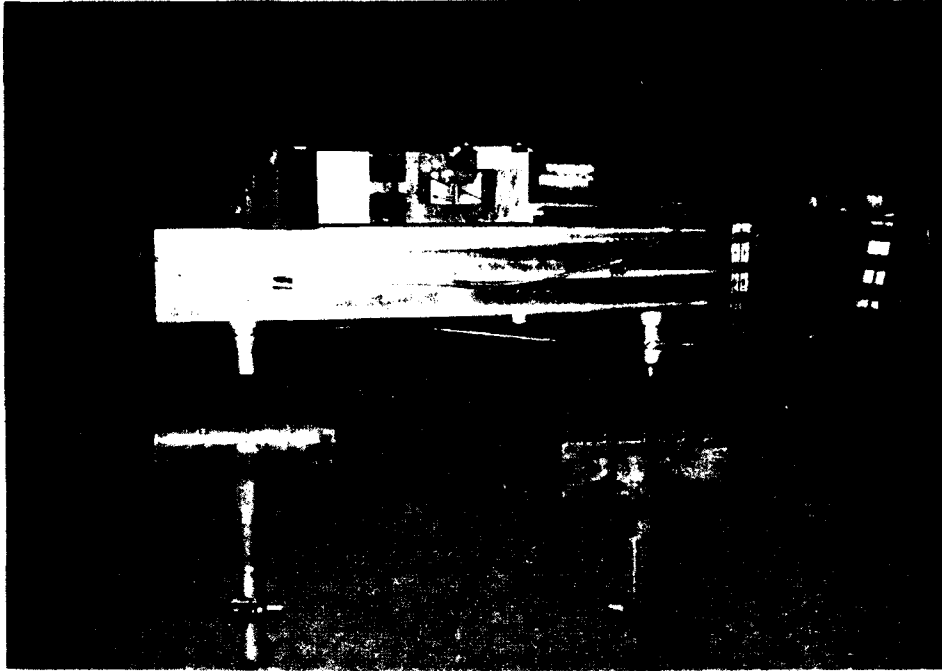


Figure 5. Nozzle Calibration Installation

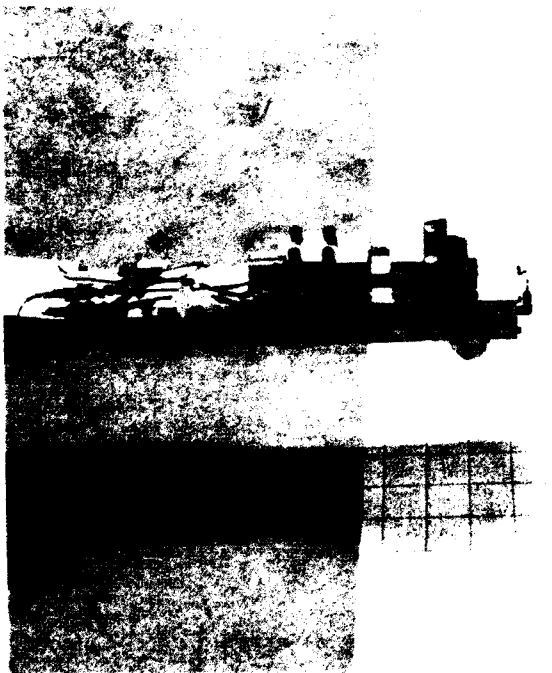


Figure 6. Flow Visualization Installation with Floor Grid

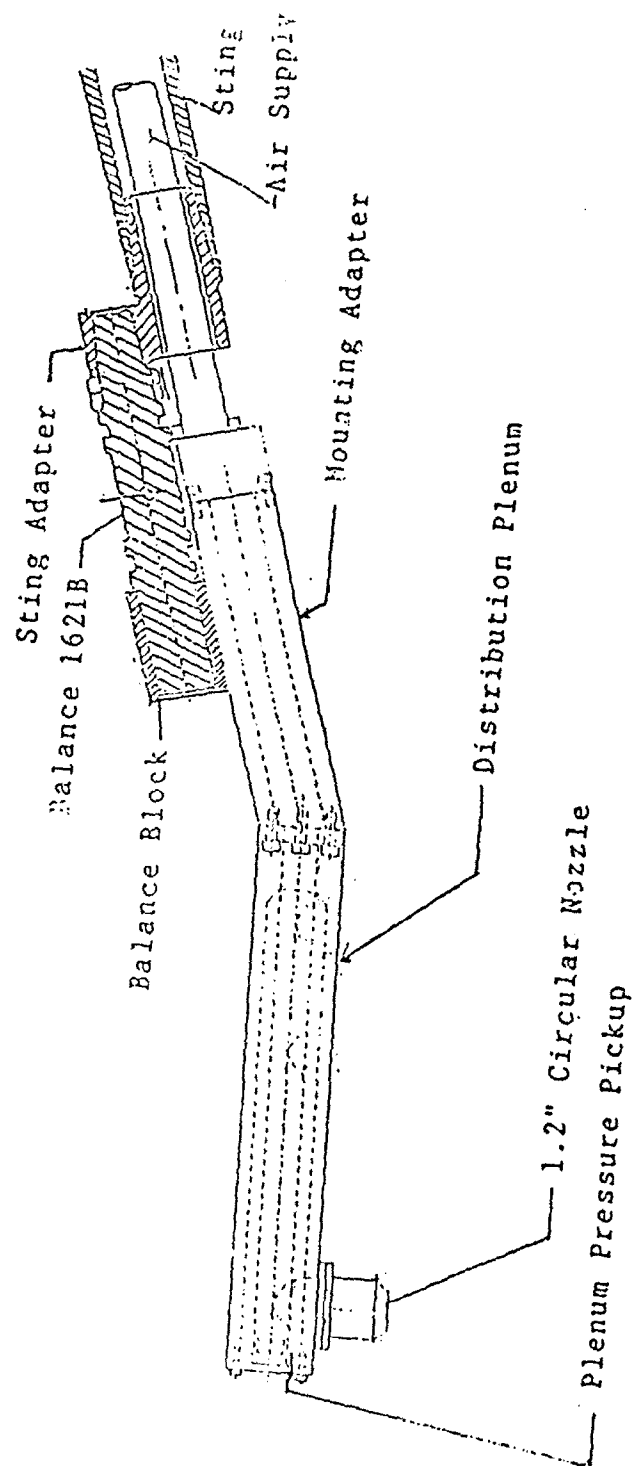


Figure 7. Wind Tunnel Installation for the Flow Visualization tests





Figure 8. Flow Visualization Residue on Floor

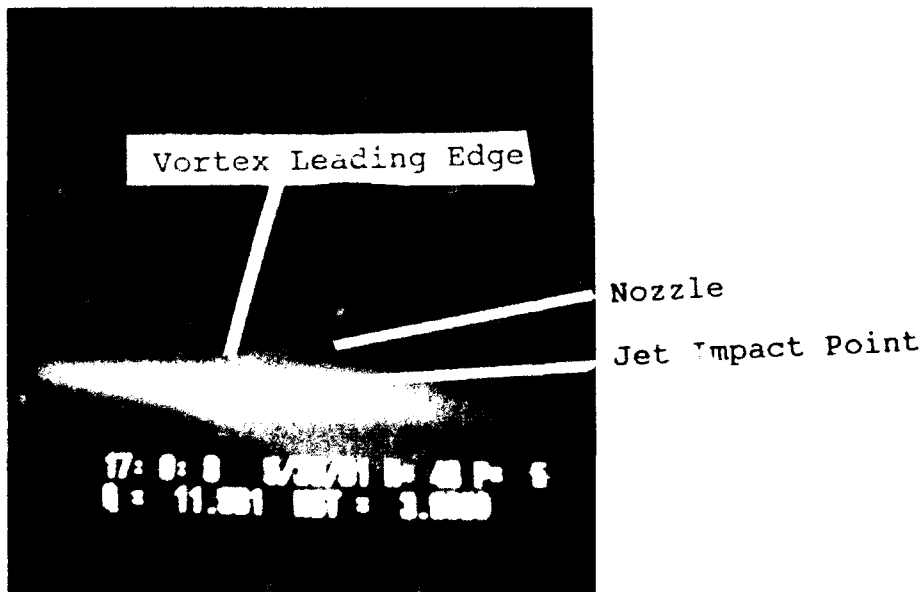


Figure 9. Sample Flow Visualization on TV Screen



Figure 10. Delta Wing Model with Circular Jet at FS 12

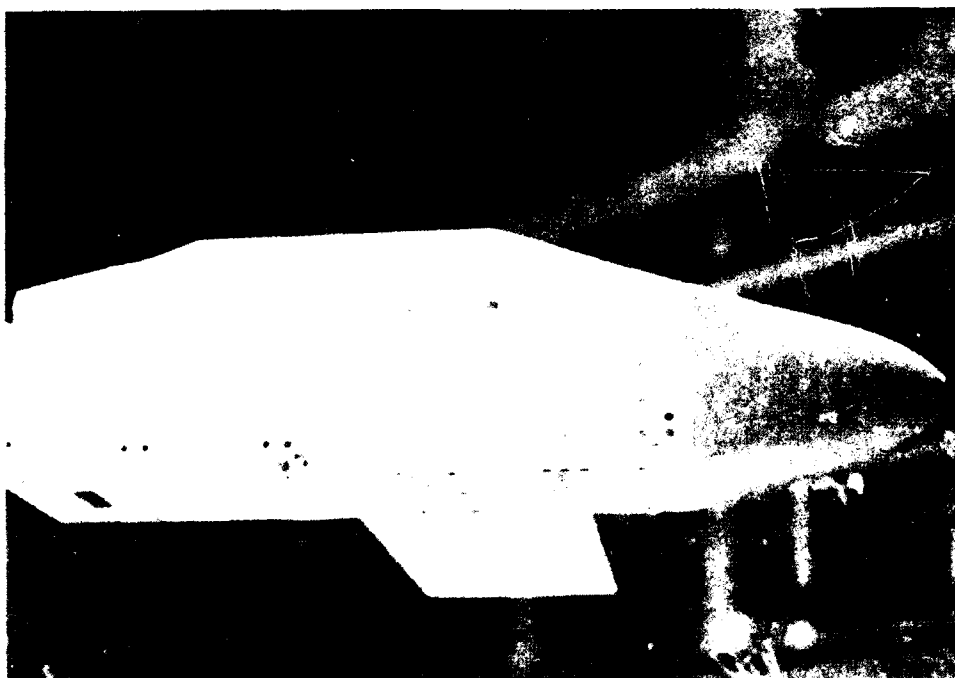


Figure 11. Generic STOL Model with Basic Wing at FS 10 and Rectangular Nozzle at FS 24, Config BR24W10



Figure 12. Generic STOL Model with Flapped Wing at FS 10 and Rectangular Nozzle at FS 24, Config BR24W10F

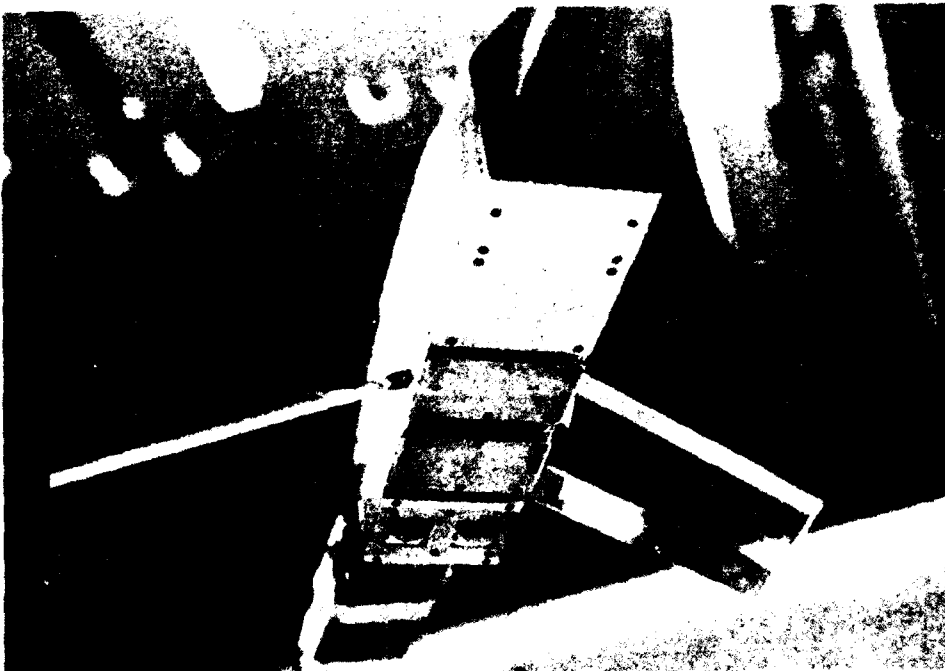


Figure 13. Generic STOL Model with Swept Wing at FS 14 and Thrust Reverser Nozzle at FS 24, Config BTR24W14

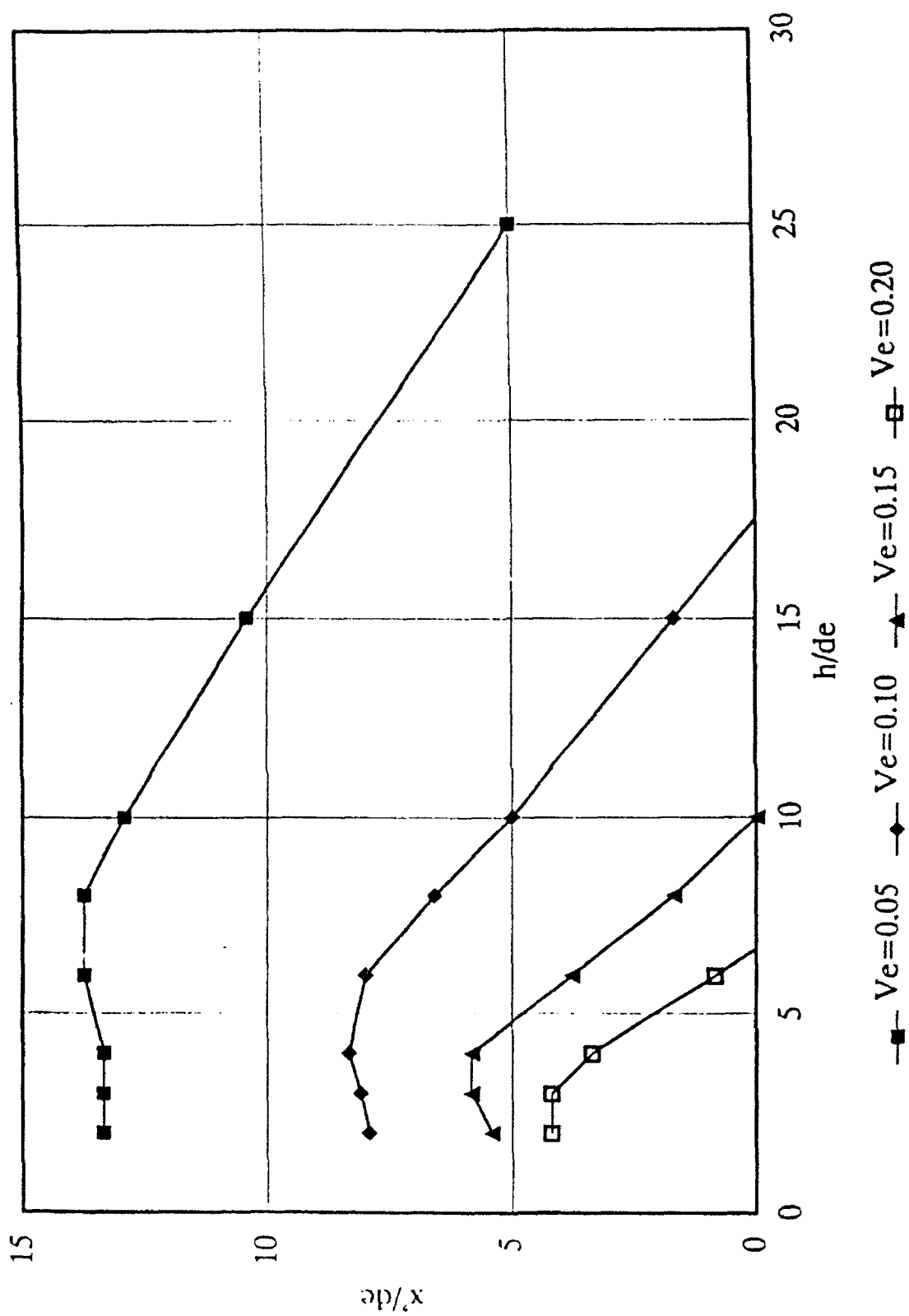


Figure 14. Ground Vortex Penetration, Circular Nozzle,  
 $V_b/V_o=0$

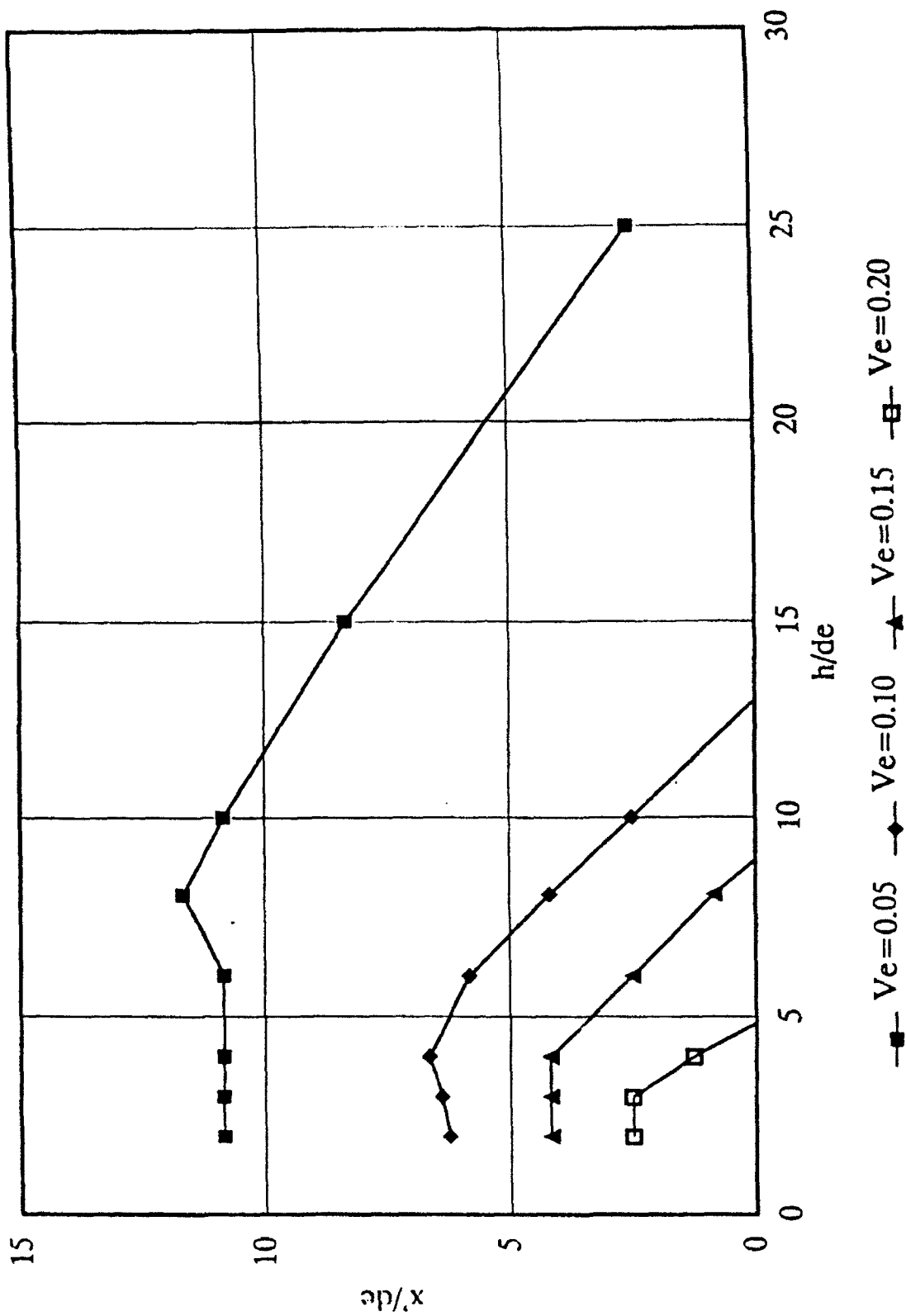


Figure 15. Ground Vortex Penetration, Circular Nozzle,  $V_b/V_o=1.0$

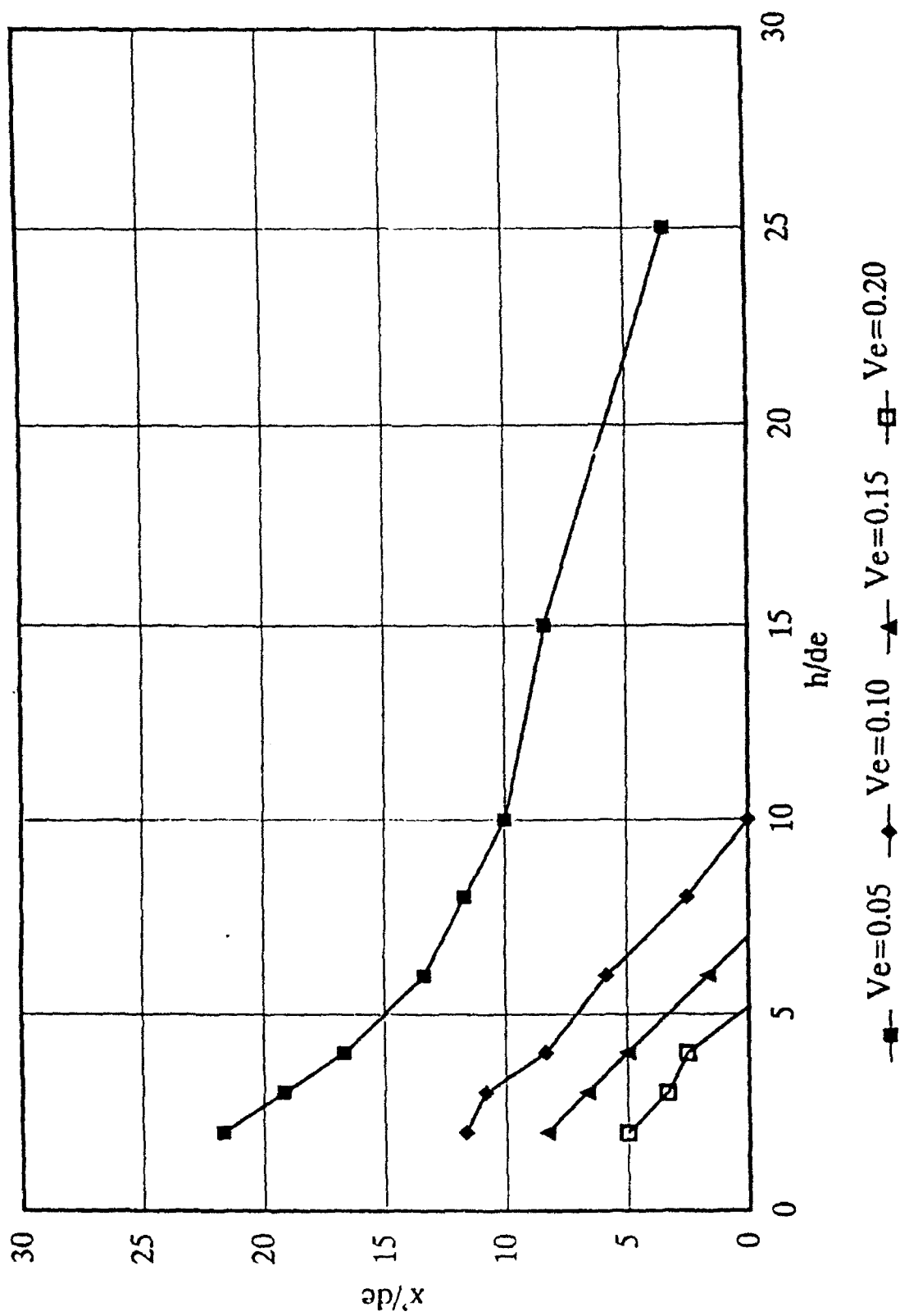


Figure 16. Ground Vortex Penetration, Rectangular Nozzle,  
 $v_b/v_o=0$

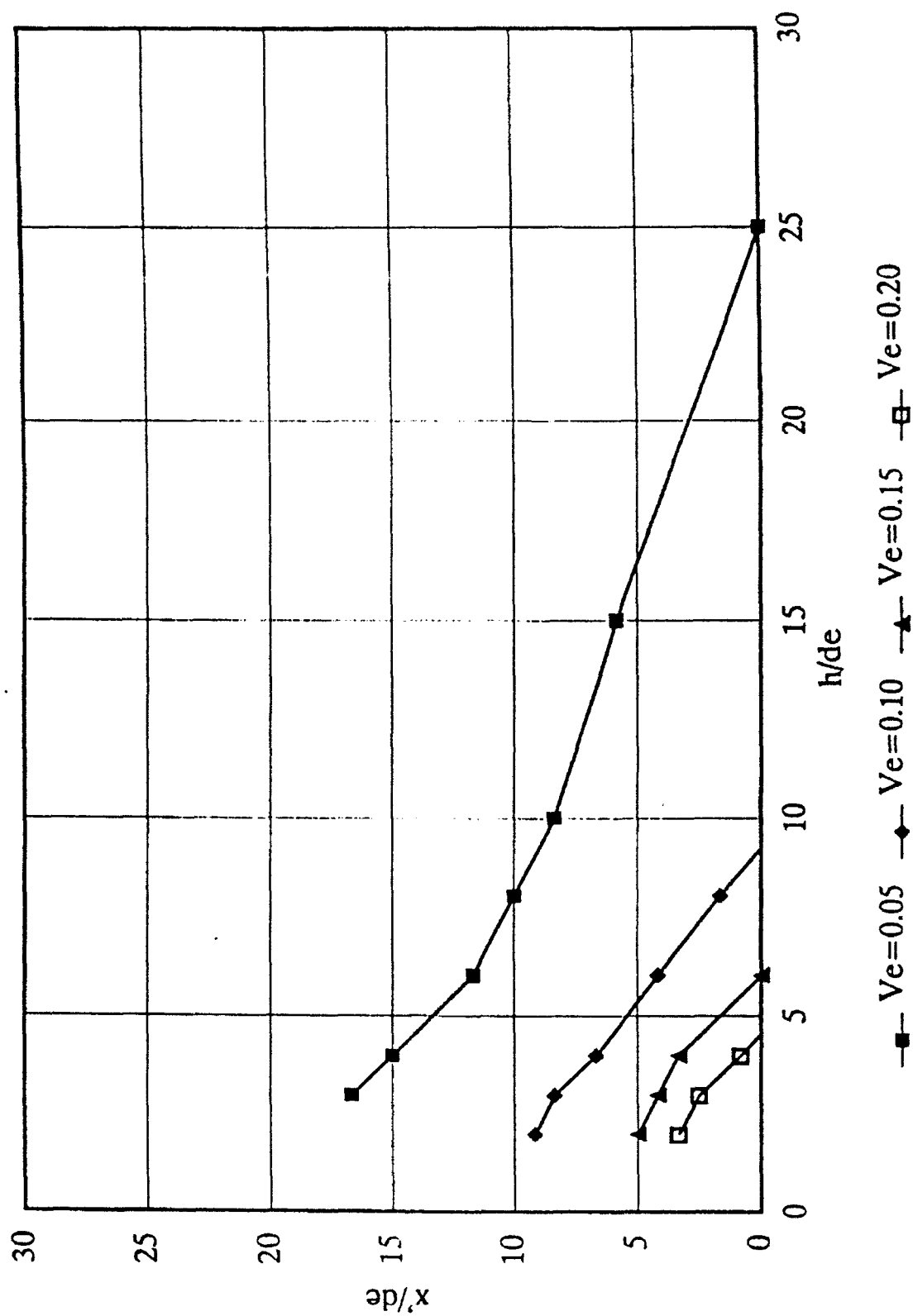
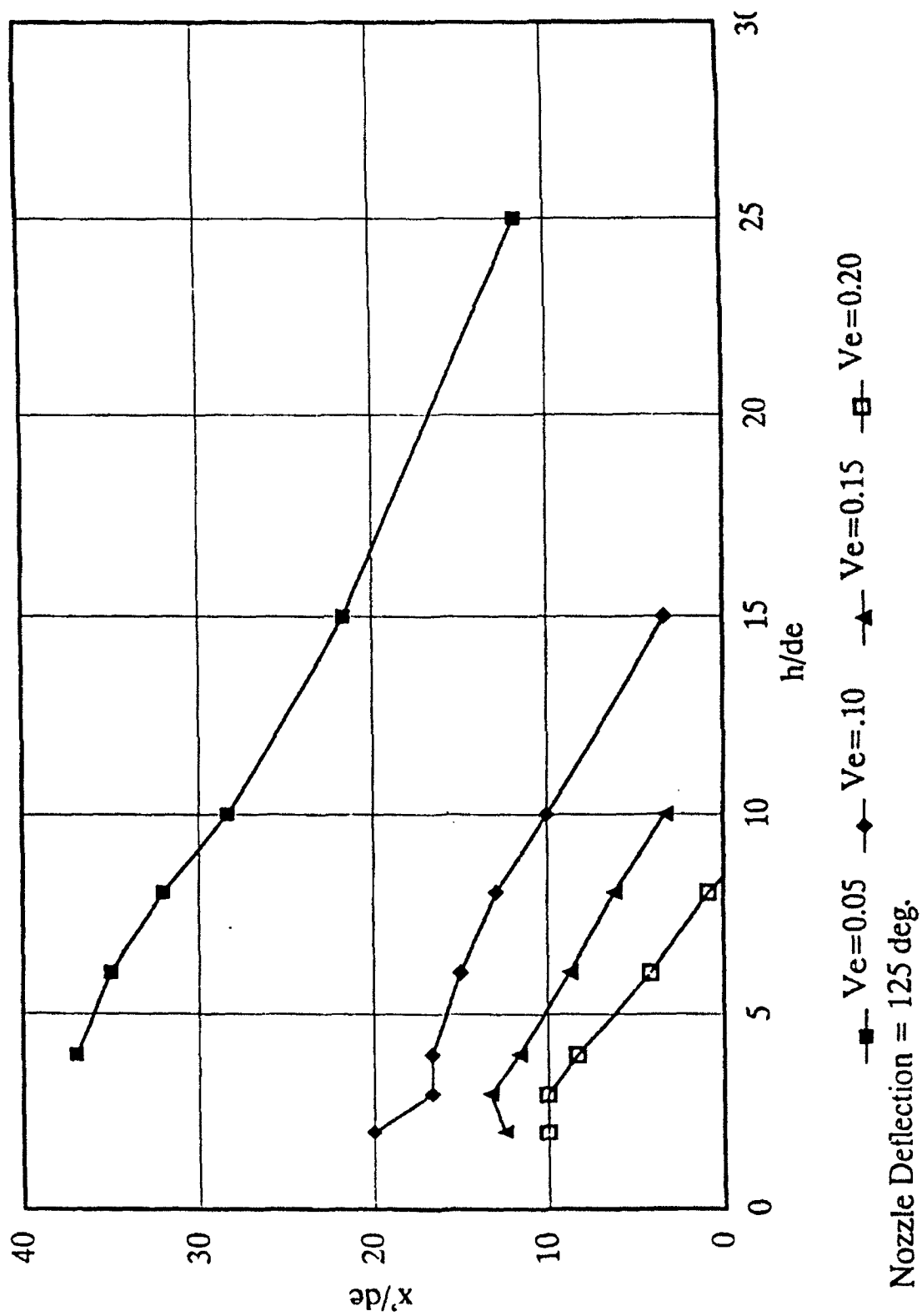


Figure 17. Ground Vortex Penetration, Rectangular Nozzle,  
 $V_b/V_o=1.0$





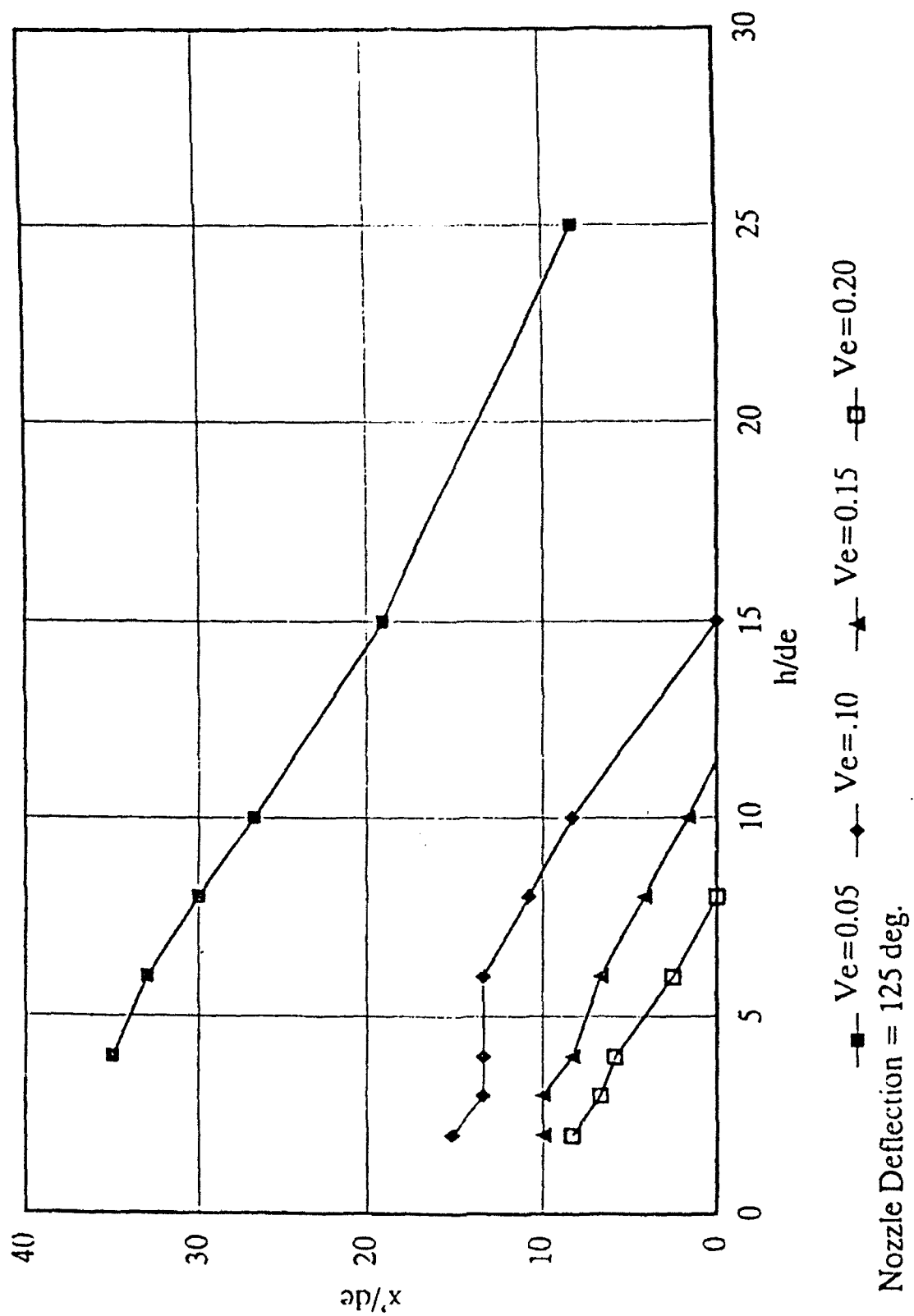
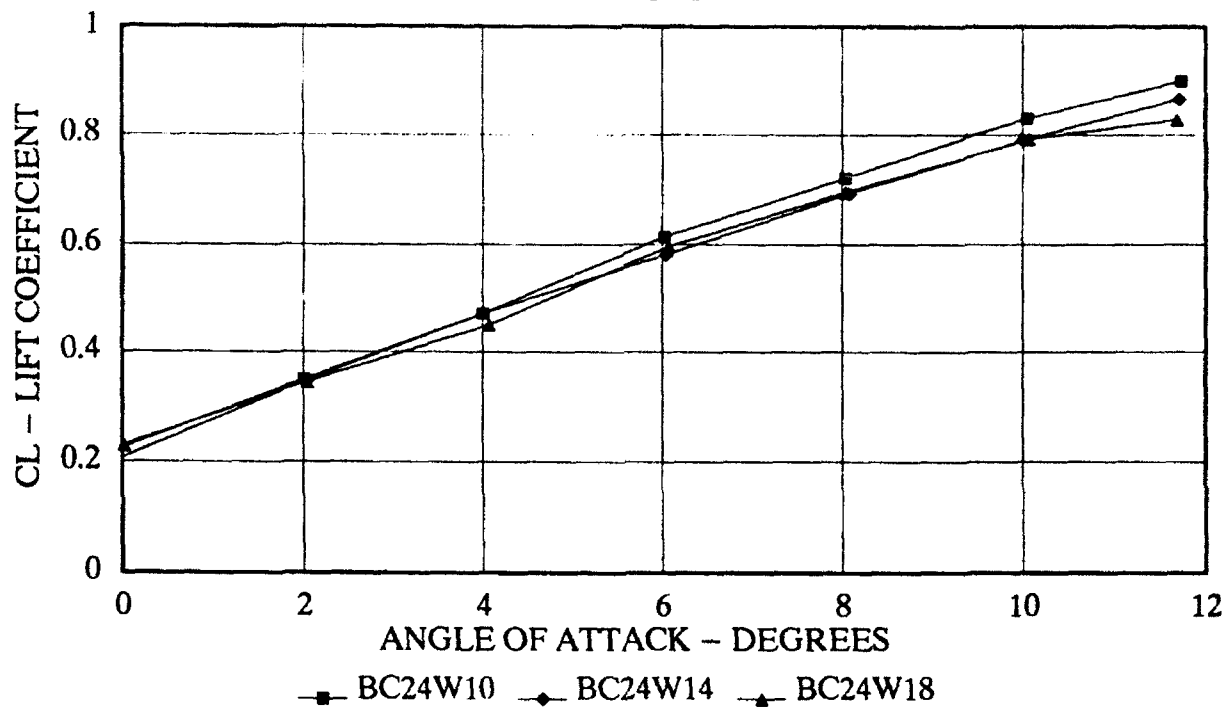


Figure 19. Ground Vortex Penetration, Thrust Reverser Nozzle,  $V_b/V_o=1.0$

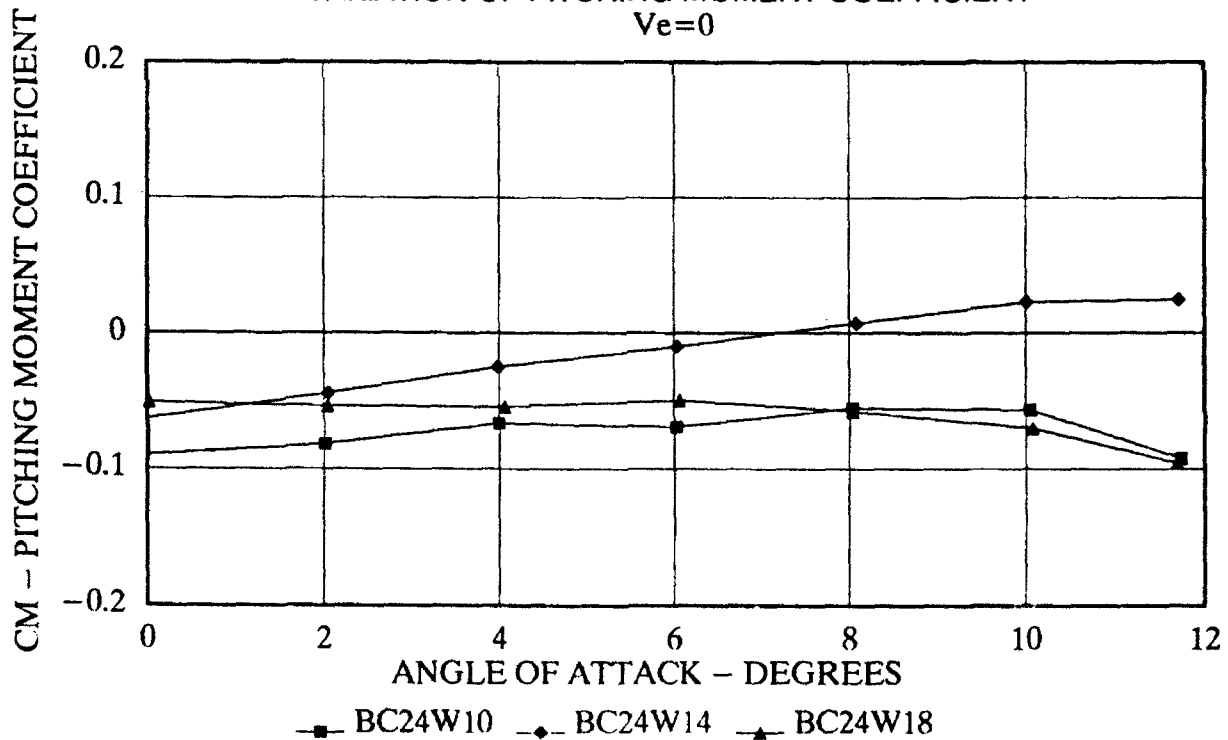
# VARIATION OF LIFT COEFFICIENT

$V_e=0$



## VARIATION OF PITCHING MOMENT COEFFICIENT

$V_e=0$

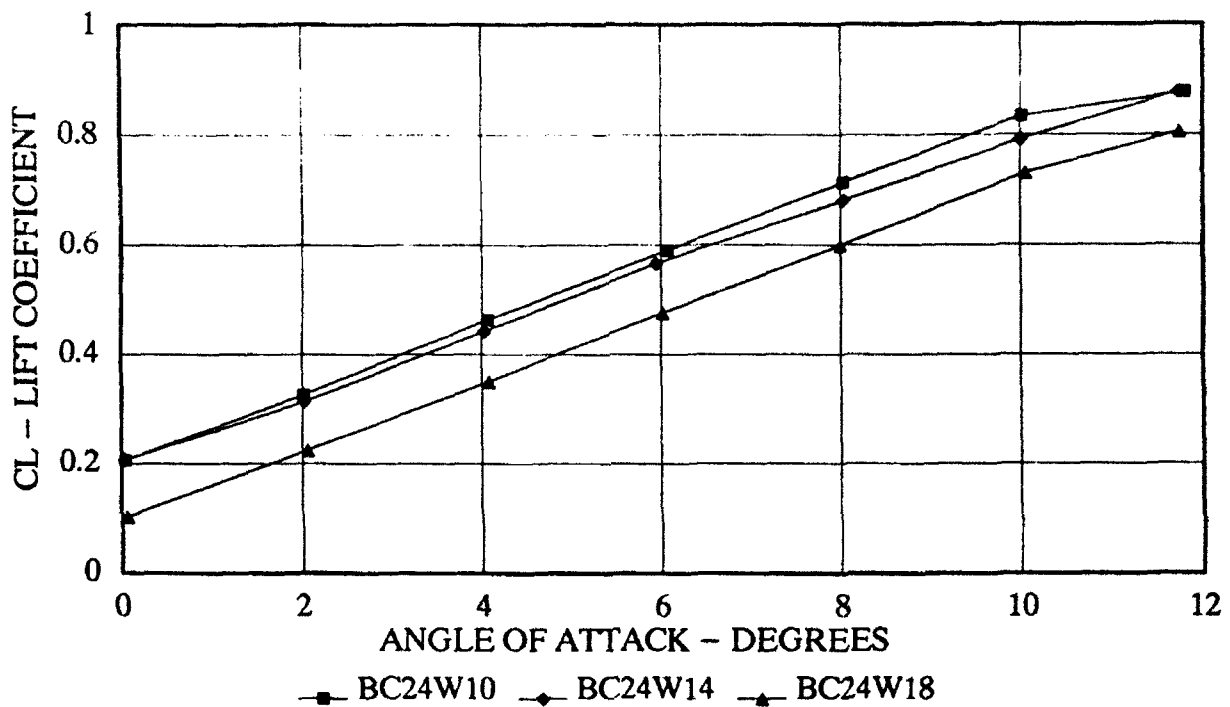


MOMENT CENTER @ 0.25C

Figure 20. Variation of Aerodynamic Characteristics with Angle of Attack, Circular nozzle,  $V_e=0$

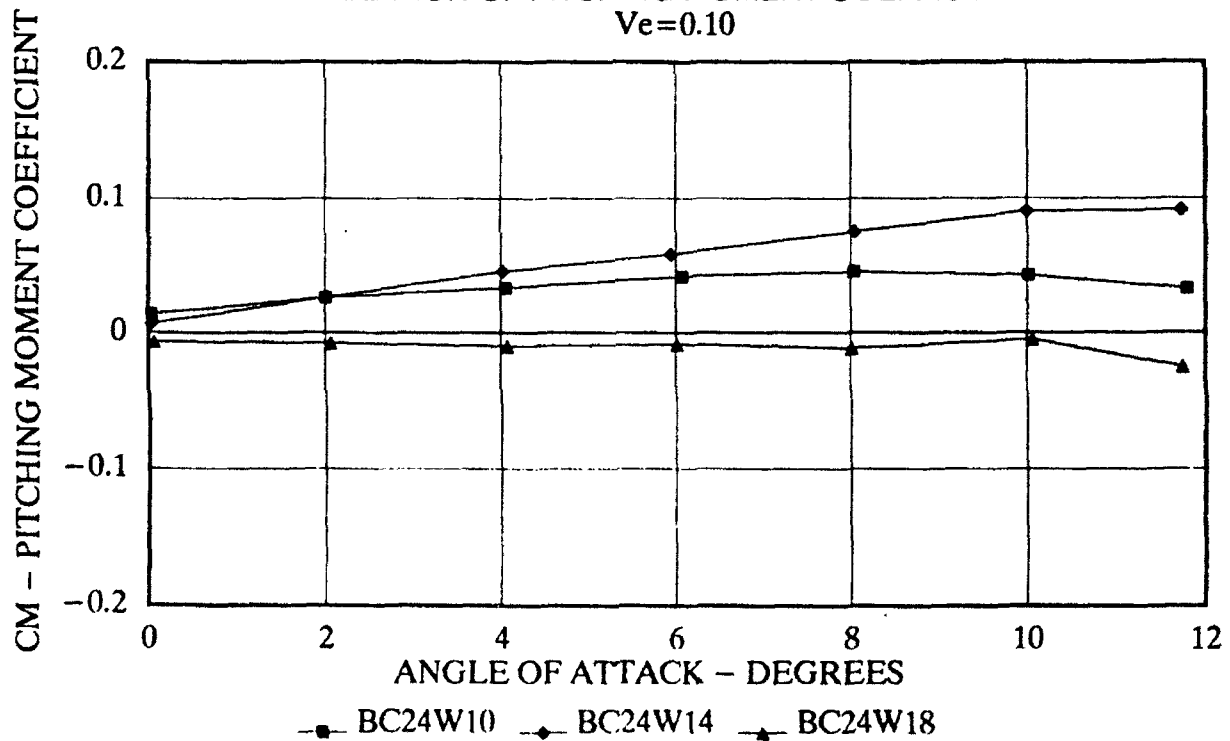
# VARIATION OF LIFT COEFFICIENT

$V_e = 1.0$



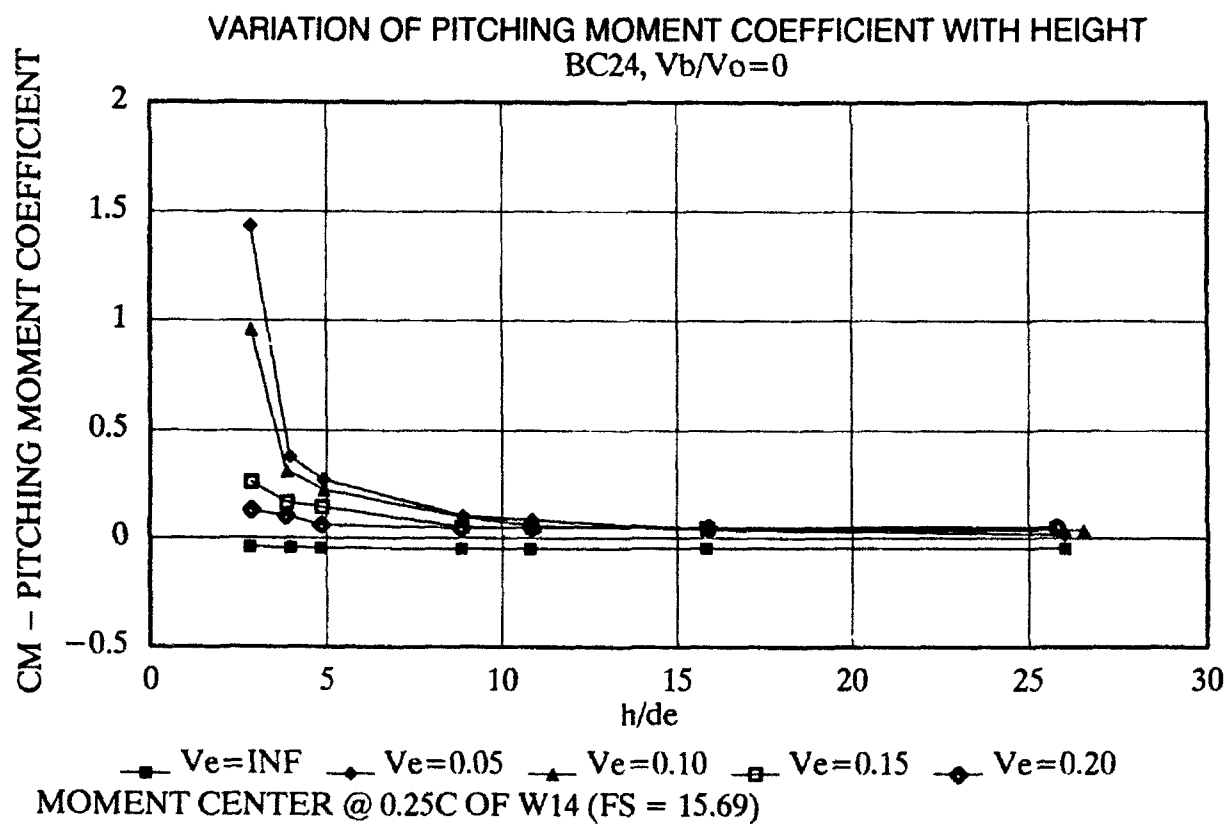
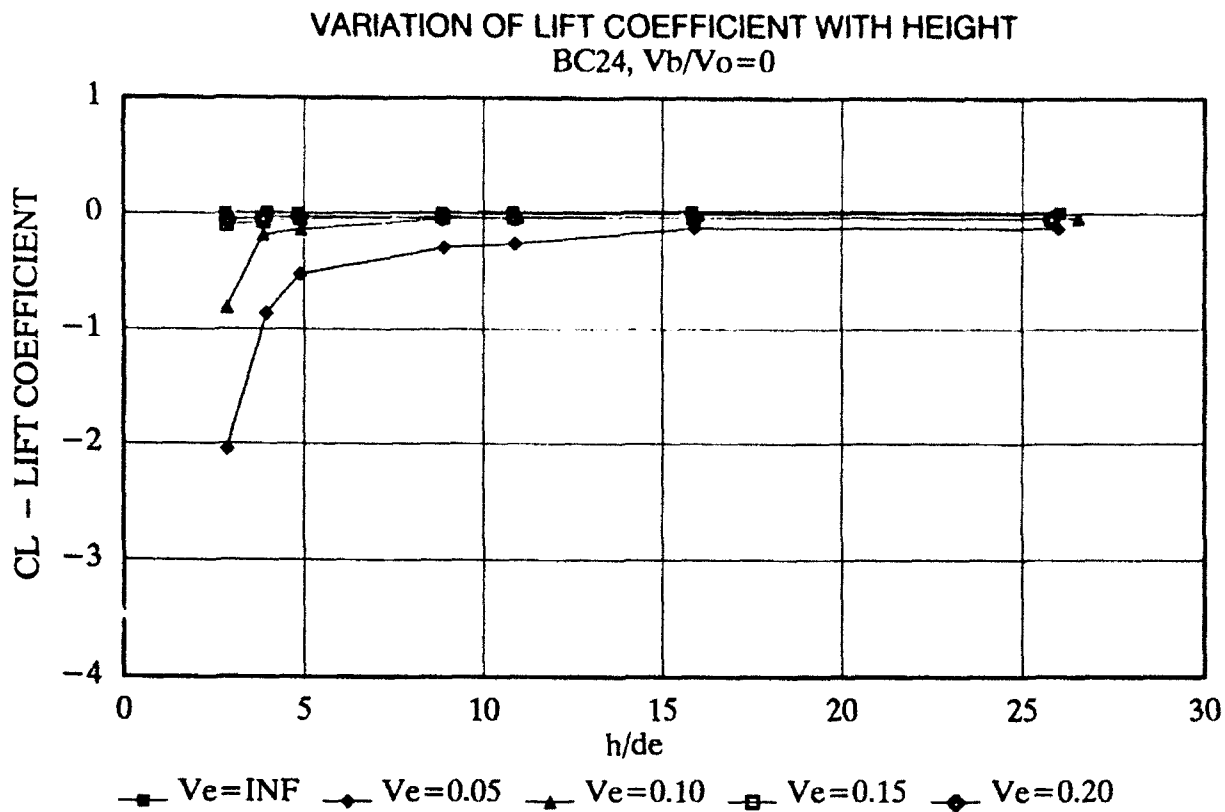
## VARIATION OF PITCHING MOMENT COEFFICIENT

$V_e = 0.10$



MOMENT CENTER @ 0.25C

Figure 21. Variation of Aerodynamic Characteristics with Angle of Attack, Circular Nozzle,  $V_e = 0.1$



**Figure 22. Variation of Aerodynamic Characteristics with Height, BC24,  $V_b/V_o=0$**

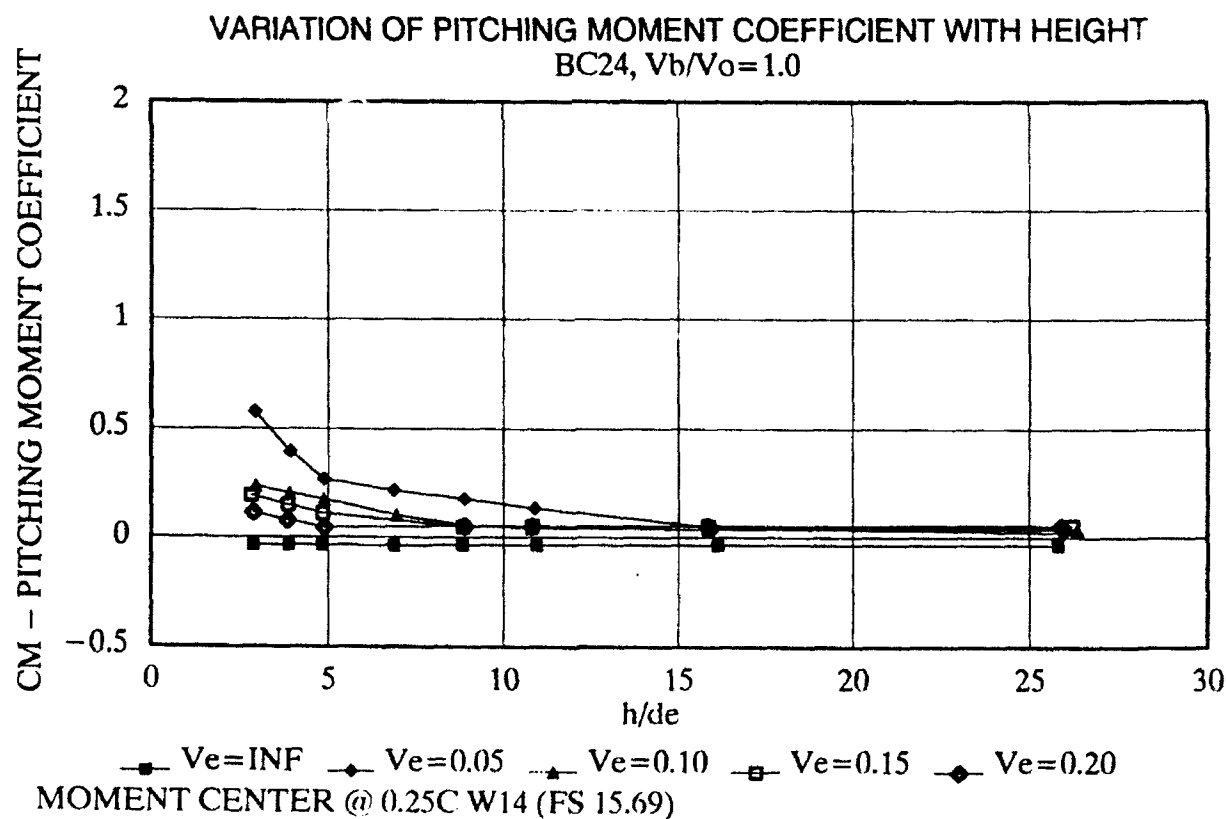
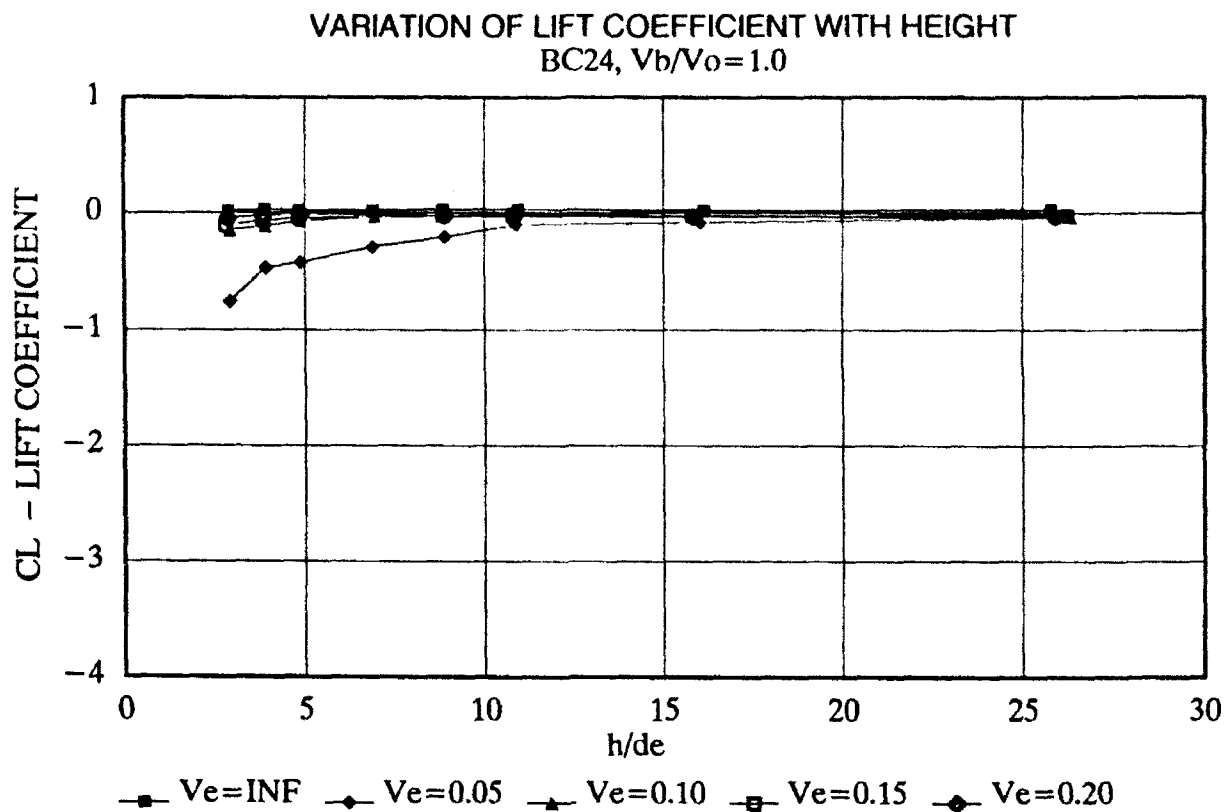


Figure 23. Variation of Aerodynamic Characteristics with Height,  
BC24,  $V_b/V_o=1.0$

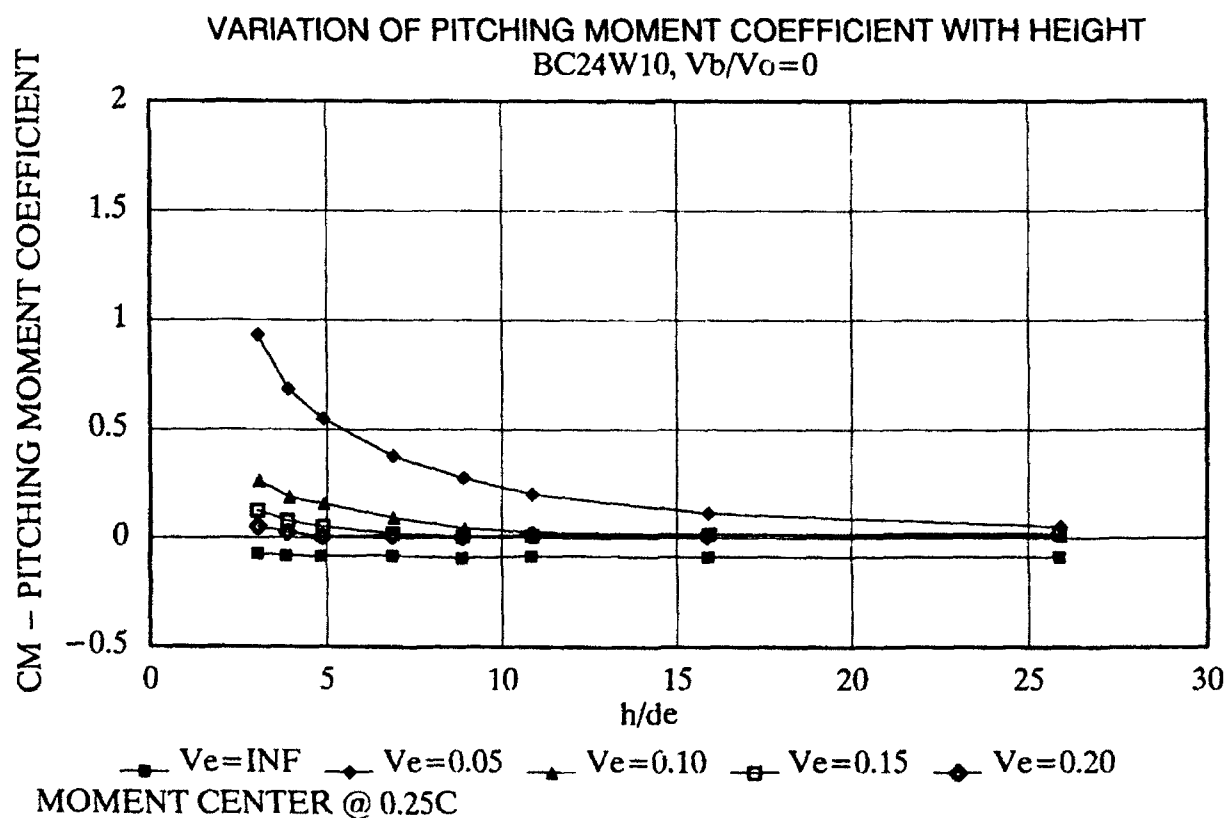
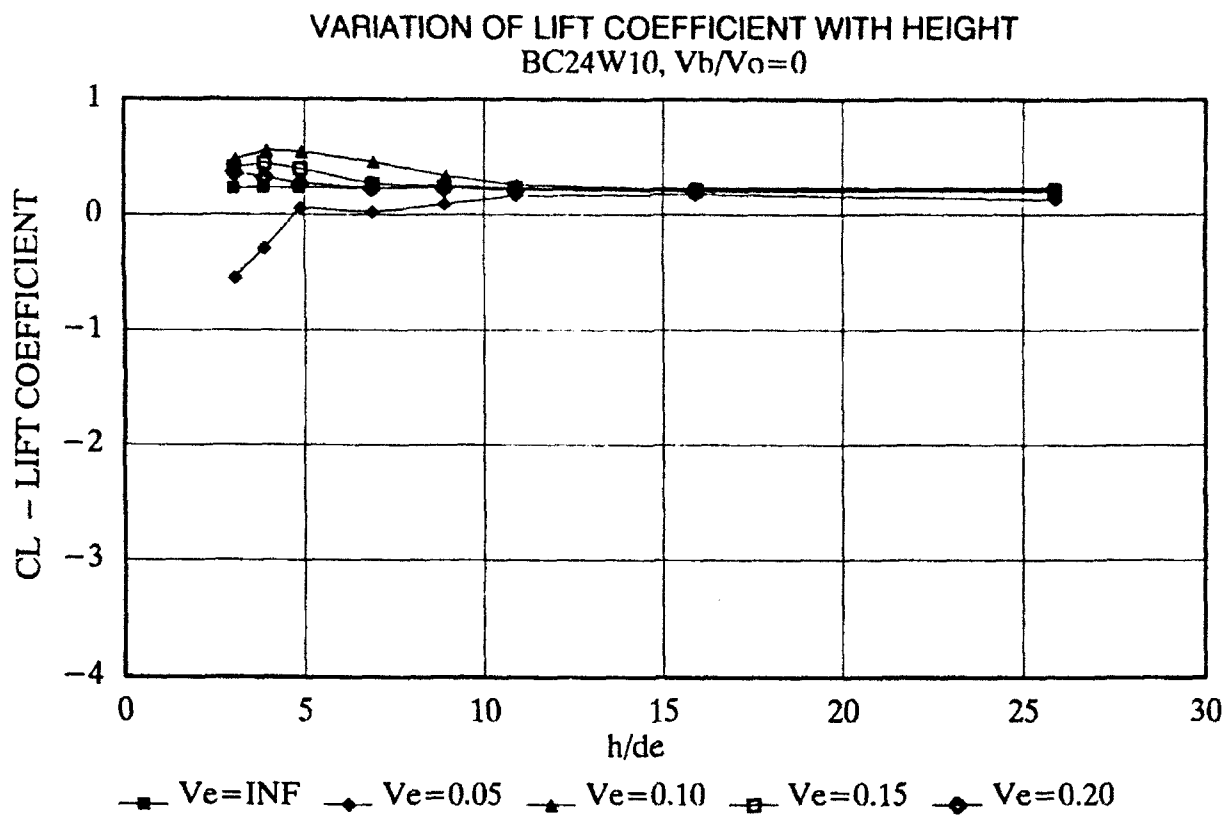
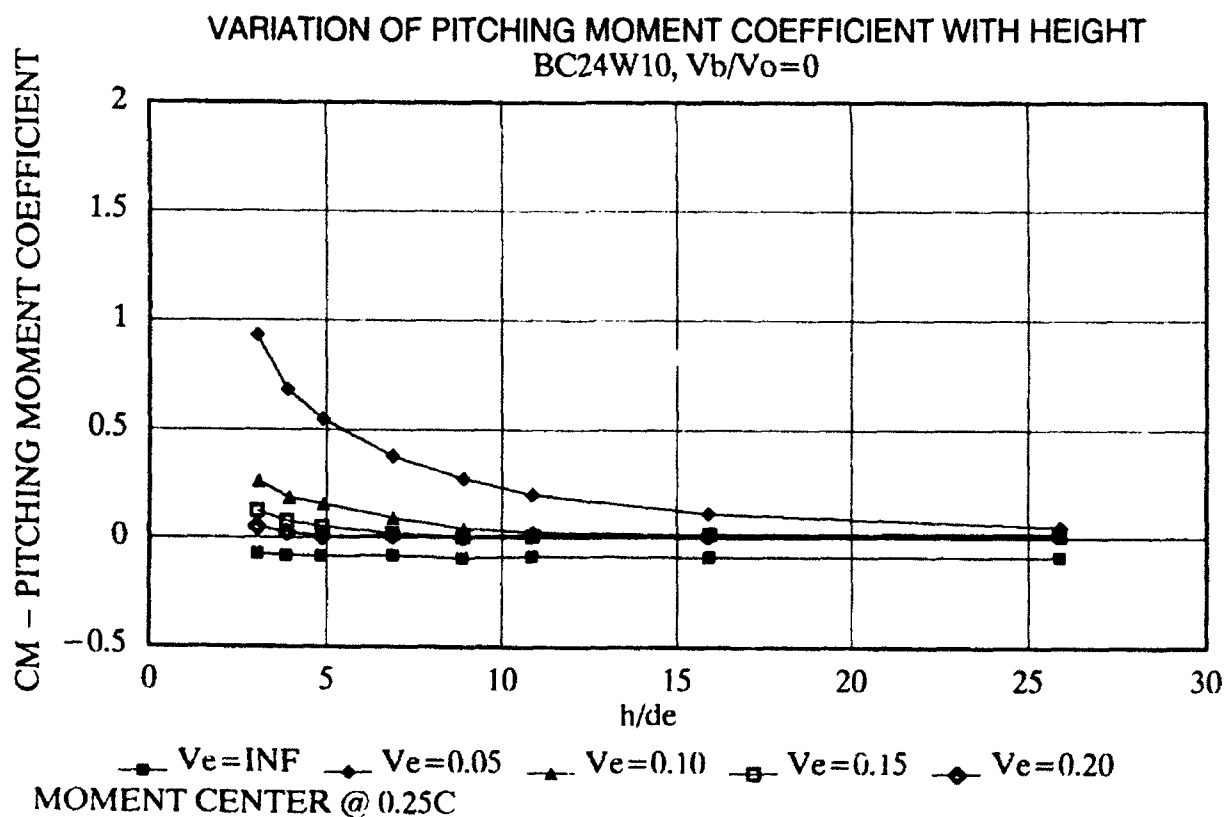
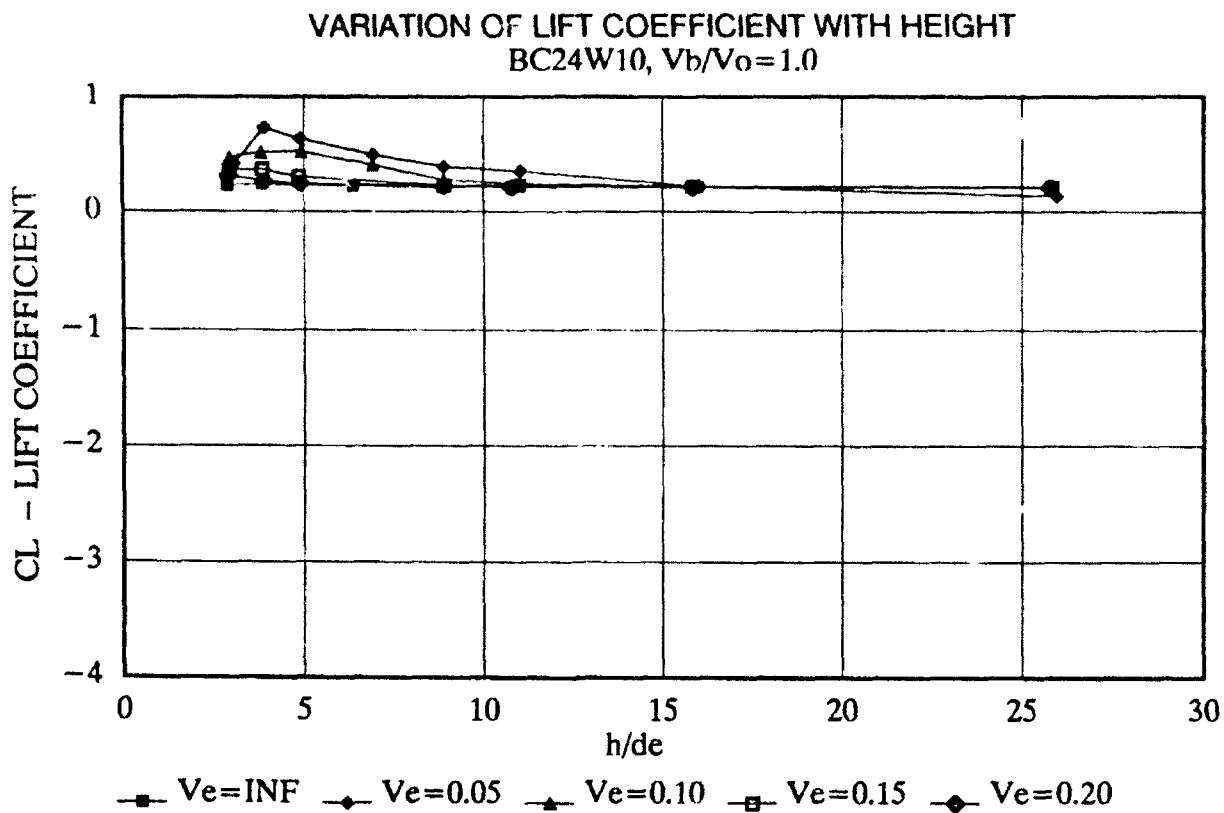
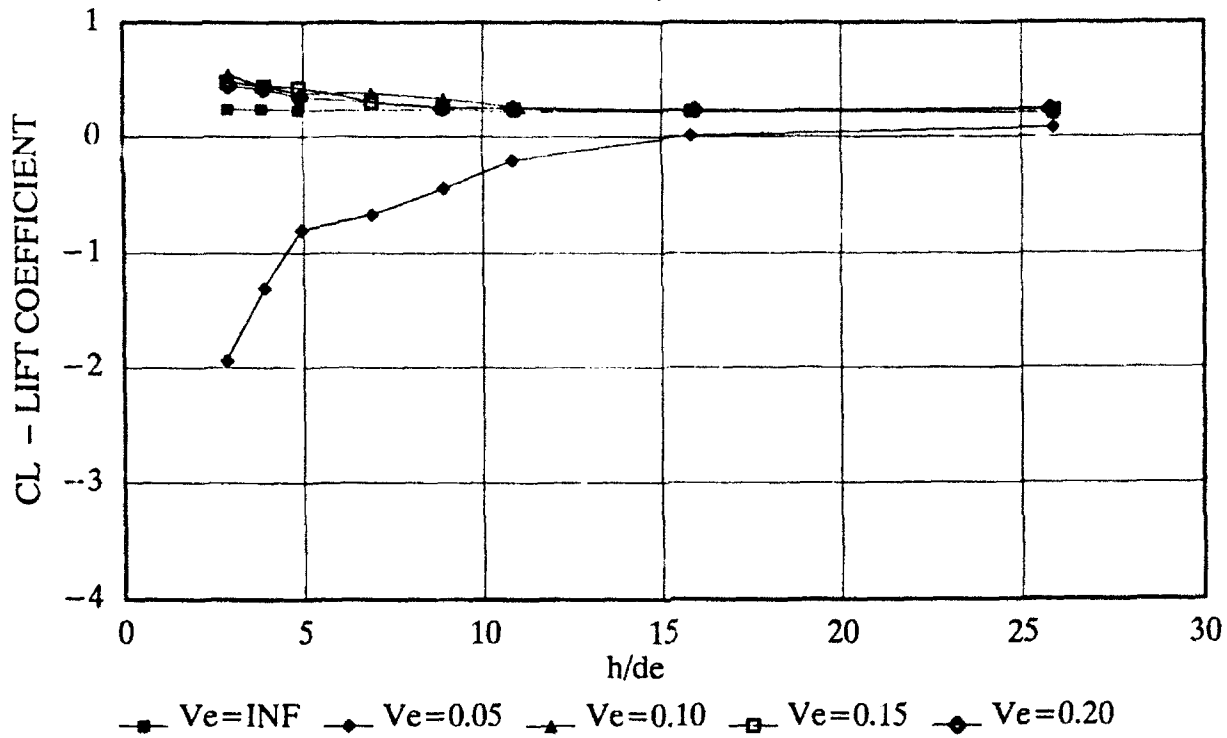


Figure 24. Variation of Aerodynamic Characteristics with Height,  
BC24W10,  $V_b/V_o=0$



**Figure 25. Variation of Aerodynamic Characteristics with Height,**  
BC24W10,  $V_b/V_o=1.0$

VARIATION OF LIFT COEFFICIENT WITH HEIGHT  
BC24W14,  $V_b/V_o=0$



VARIATION OF PITCHING MOMENT COEFFICIENT WITH HEIGHT  
BC24W14,  $V_b/V_o=0$

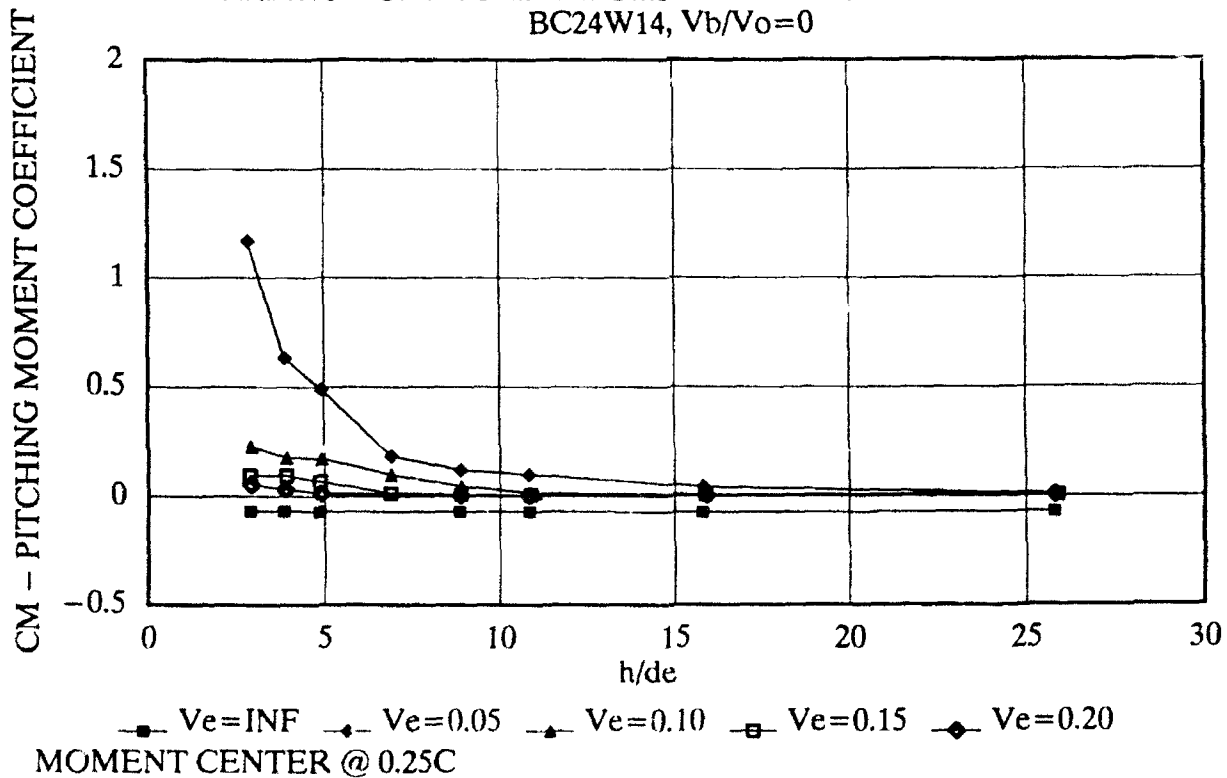


Figure 26. Variation of Aerodynamic Characteristics with Height,  
BC24W14,  $V_b/V_o=0$



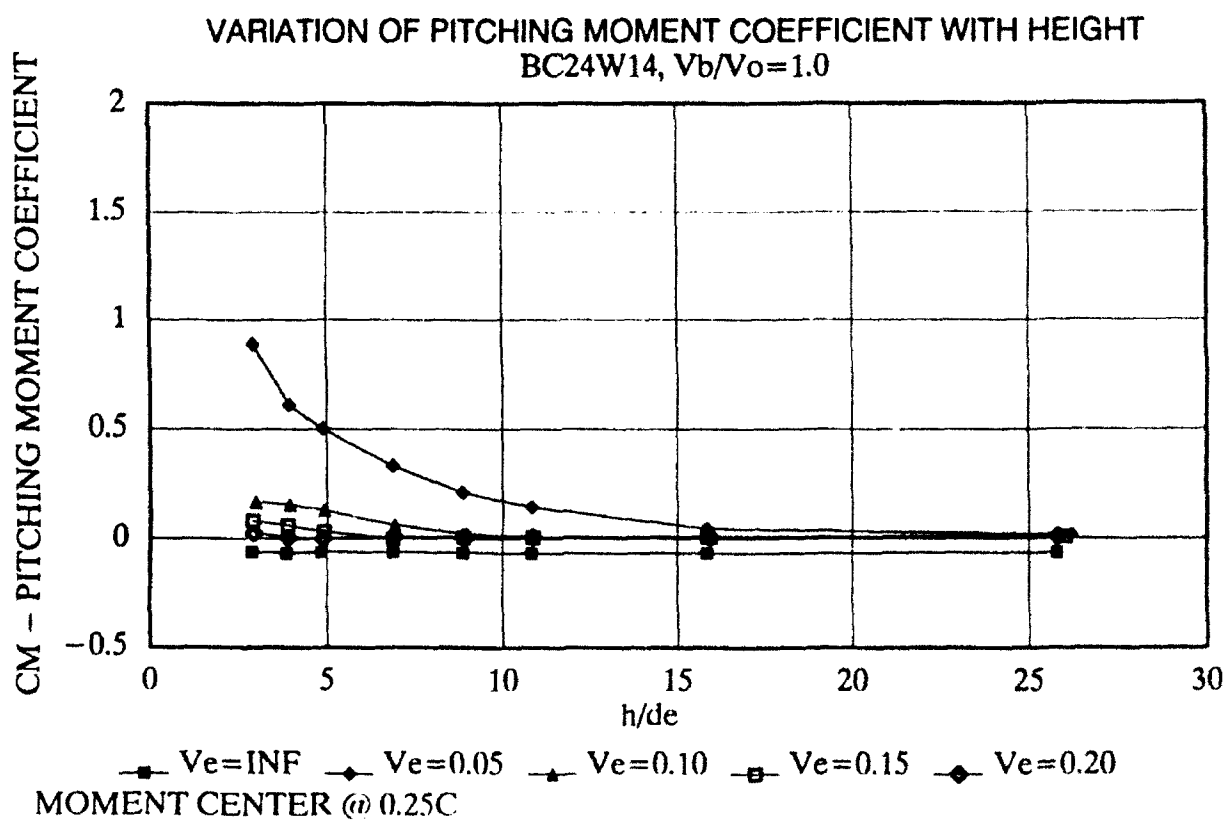
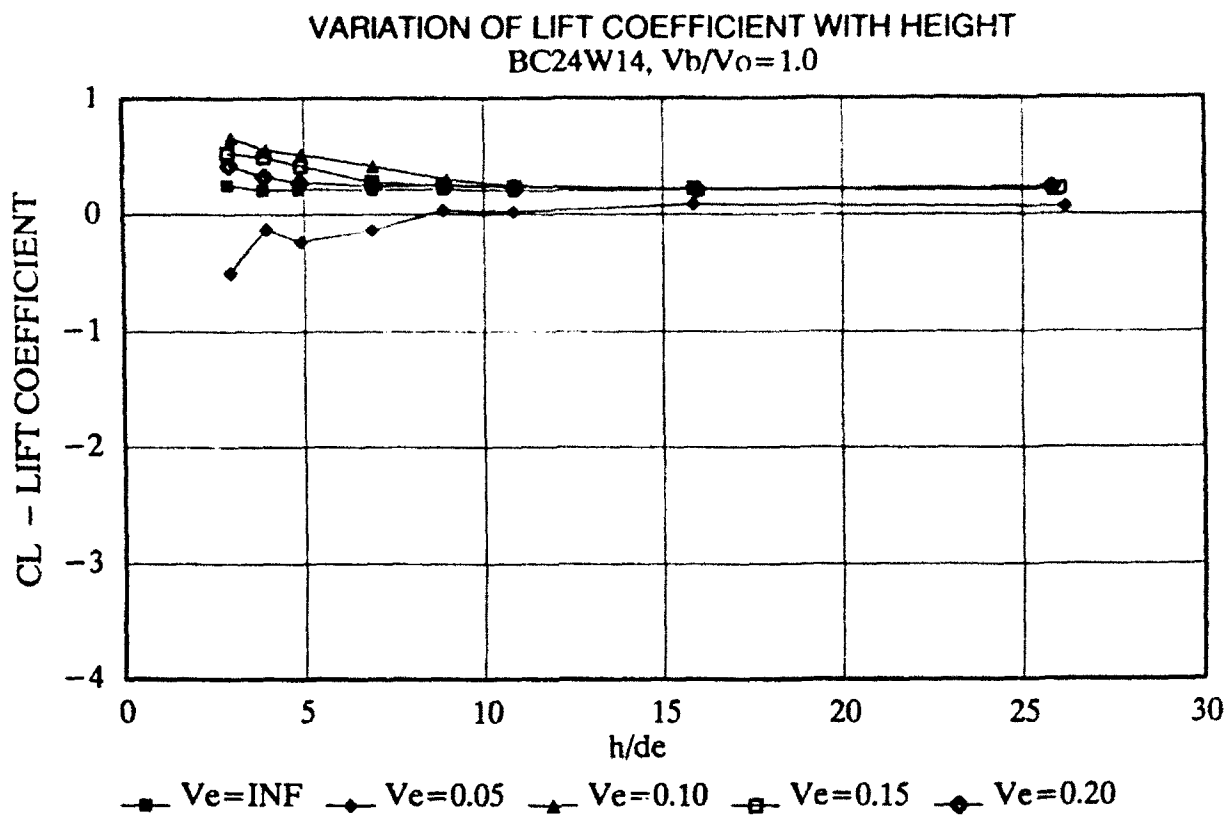
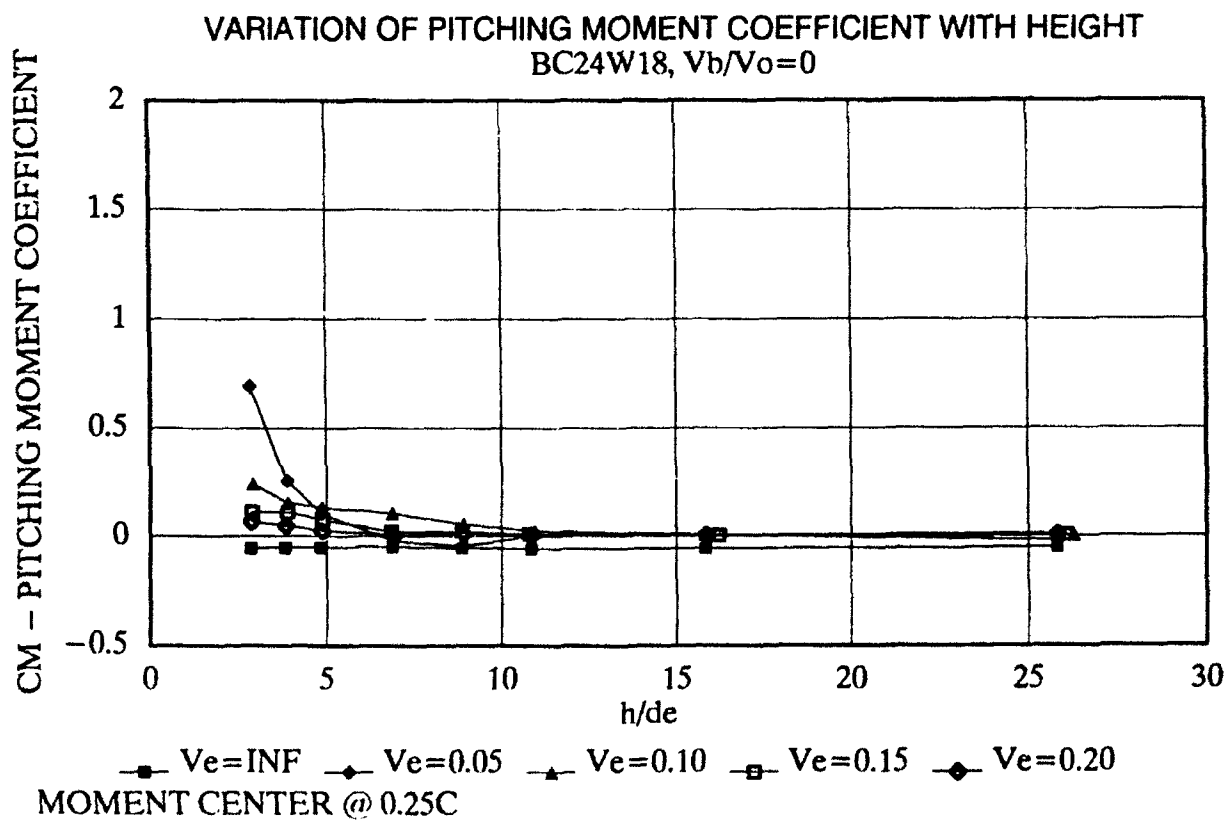
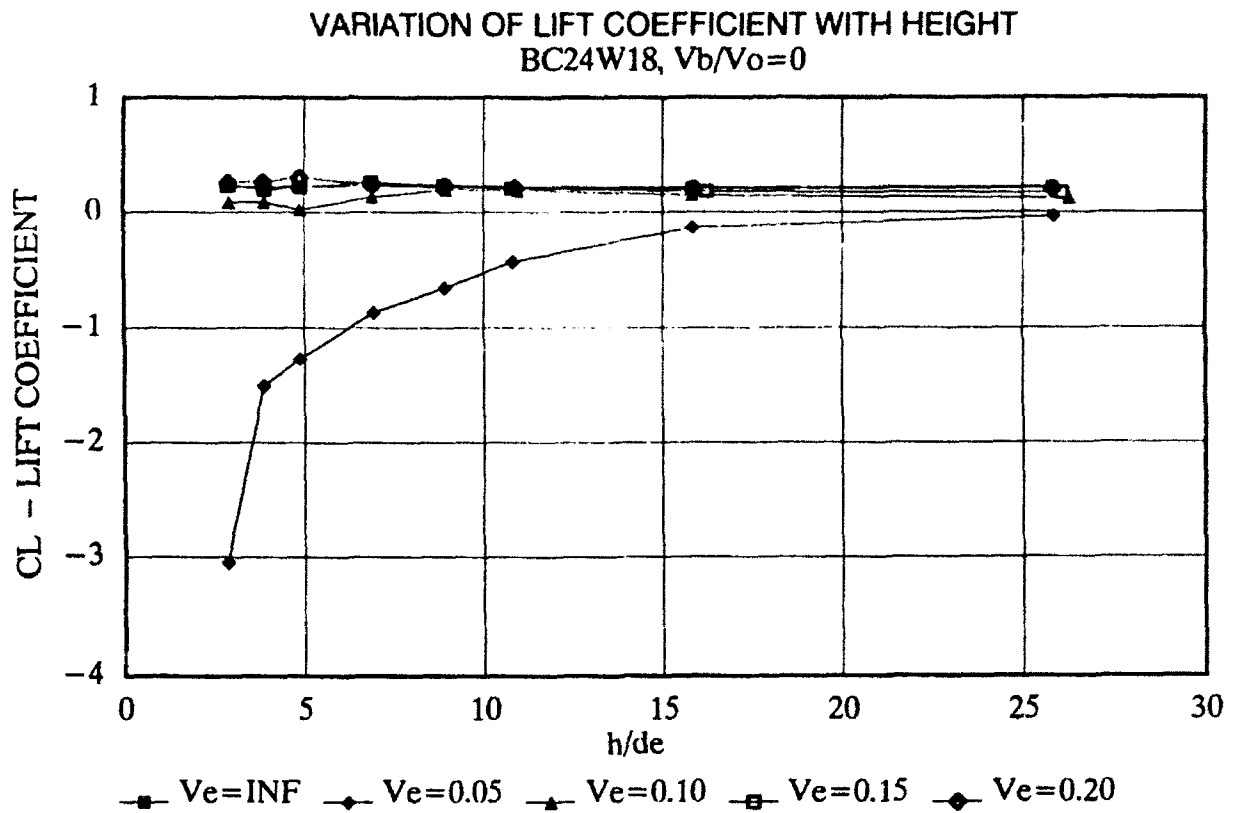


Figure 27. Variation of Aerodynamic Characteristics with Height,  
BC24W14,  $V_b/V_o=1.0$



**Figure 28. Variation of Aerodynamic Characteristics with Height,**  
BC24W18,  $V_b/V_o=0$

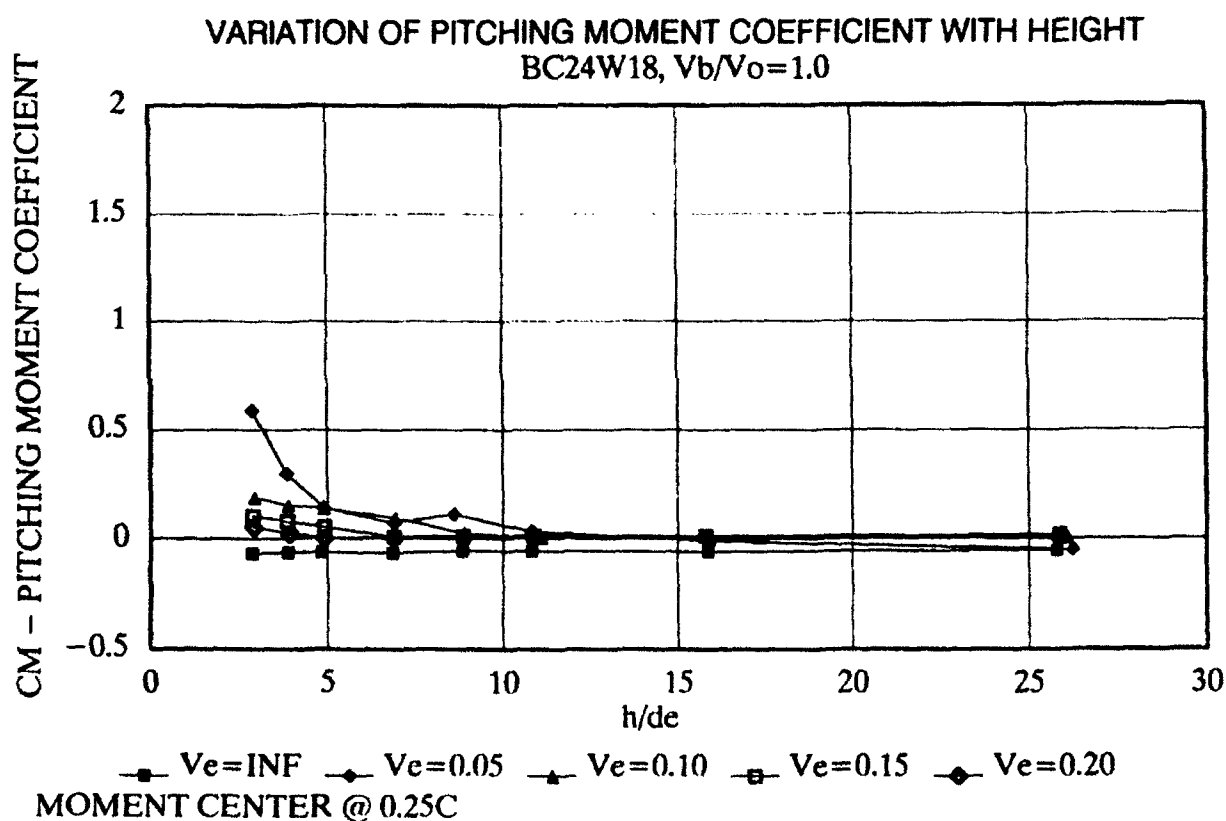
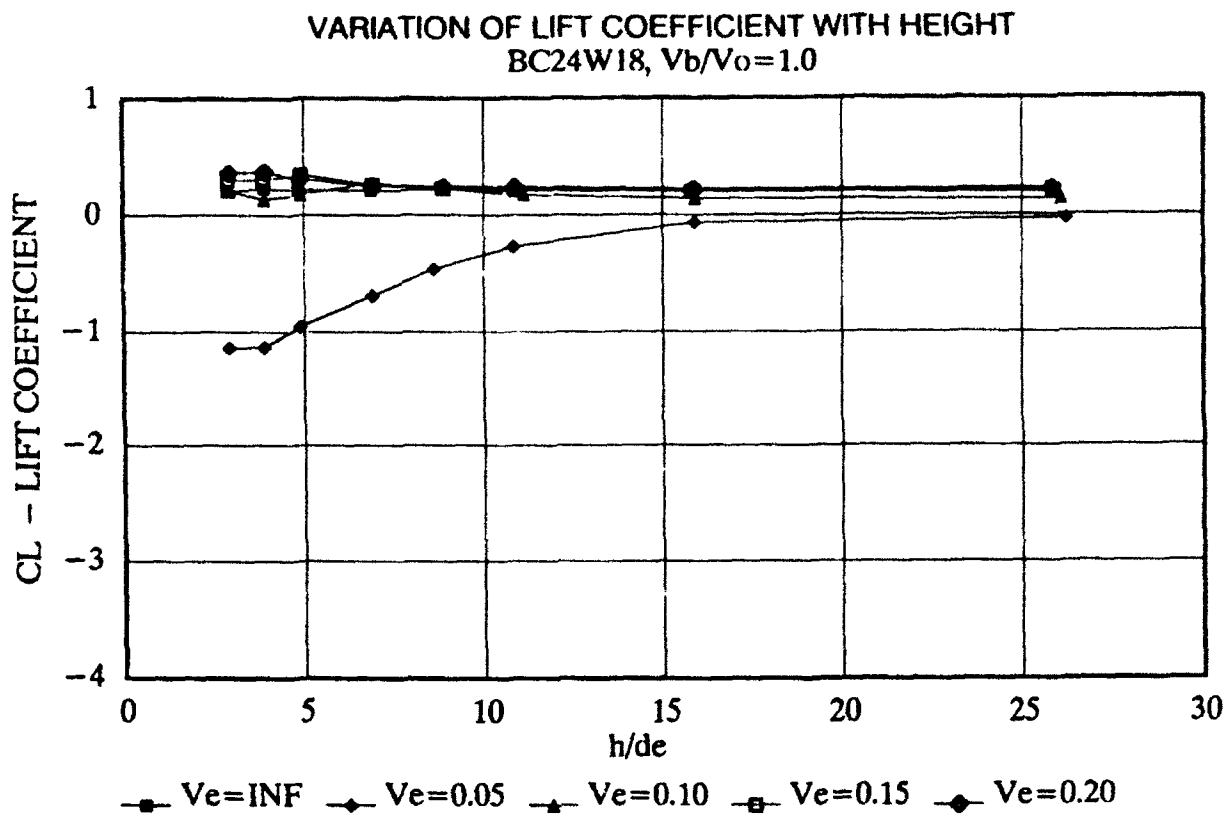


Figure 29. Variation of Aerodynamic Characteristics with Height,  
BC24W18,  $V_b/V_o=1.0$

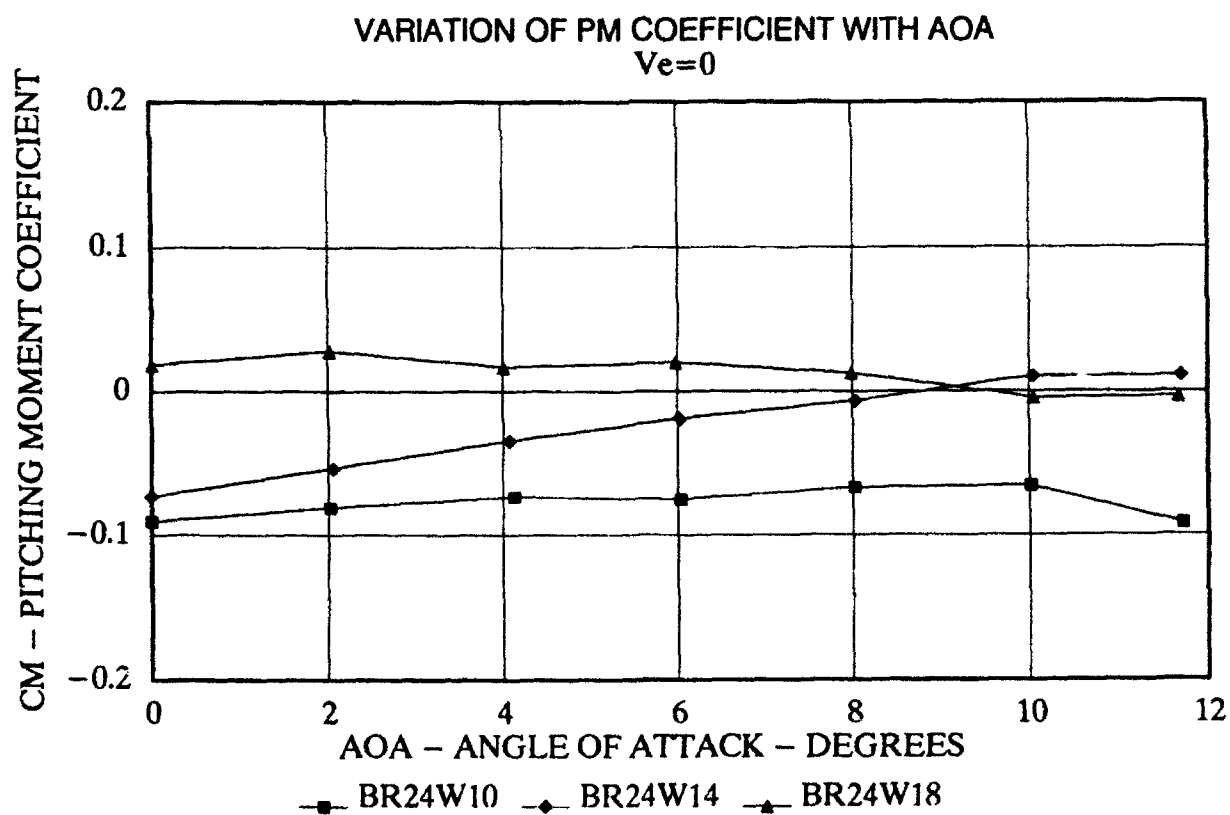
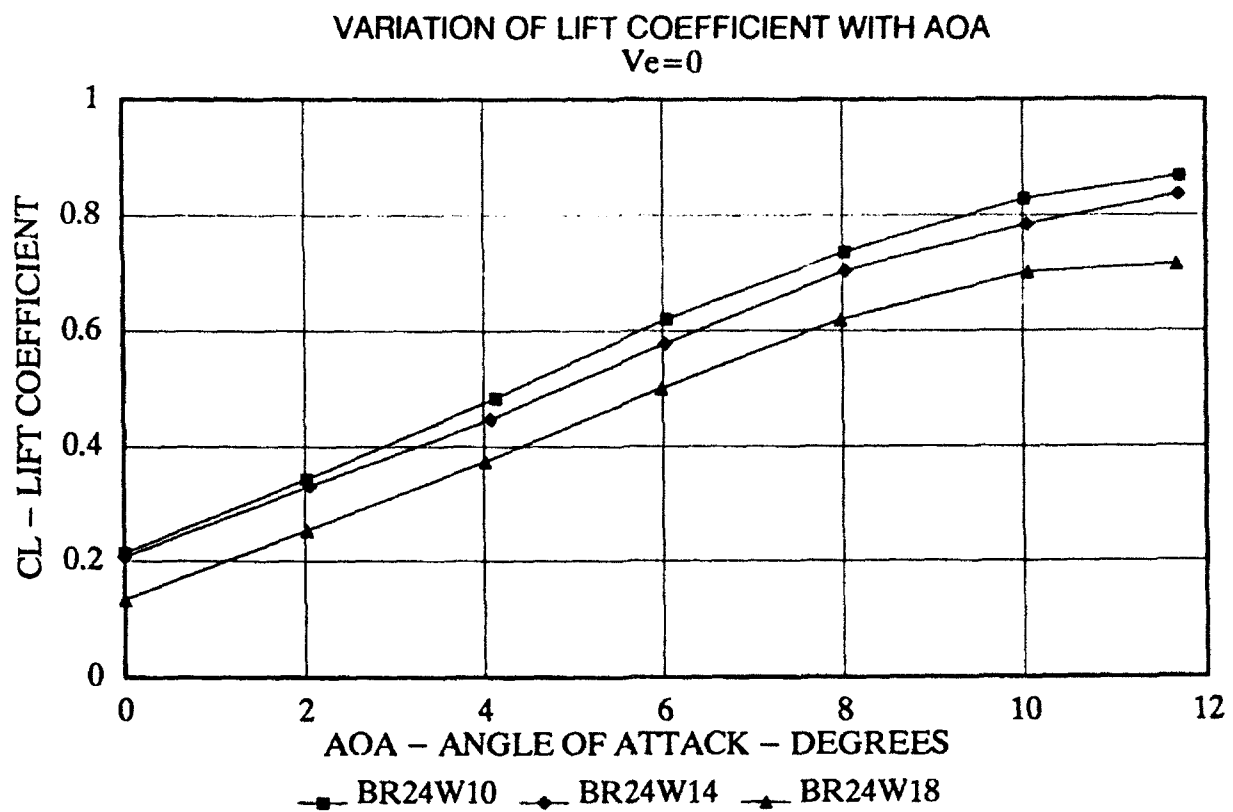
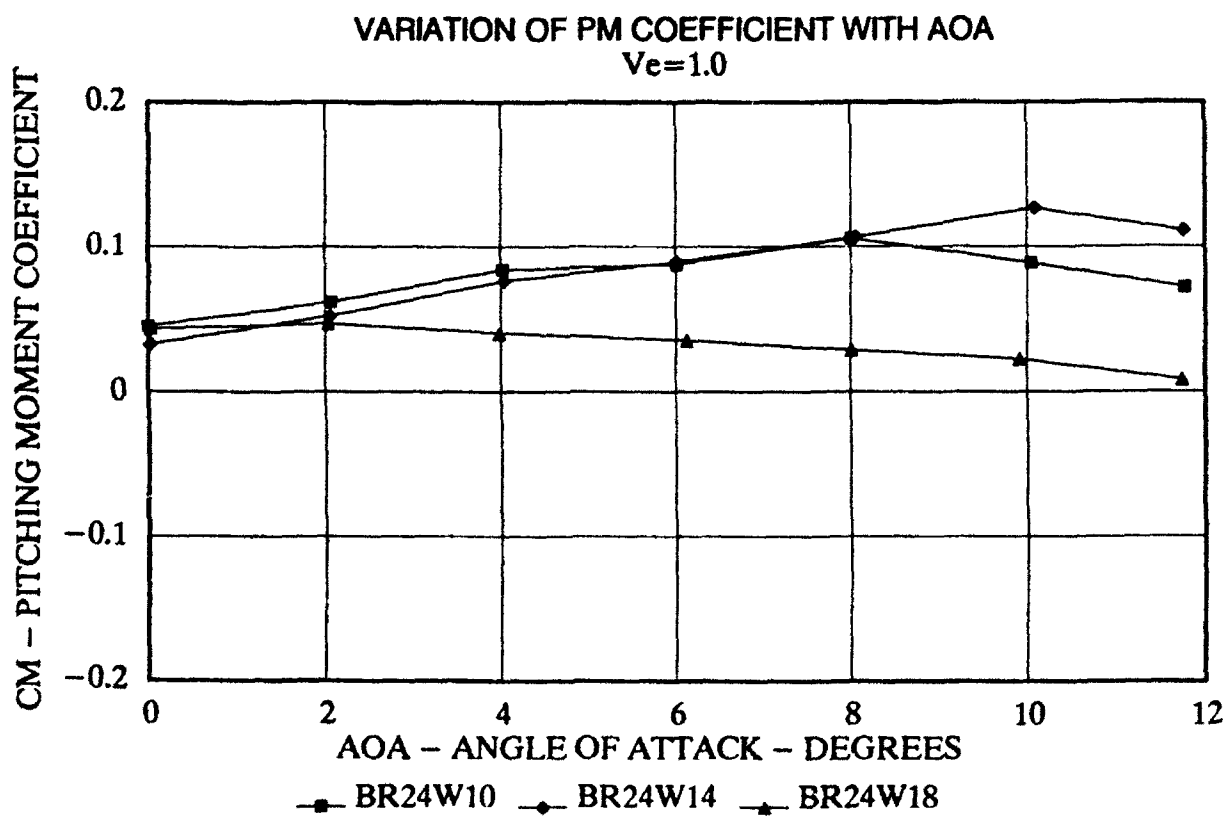
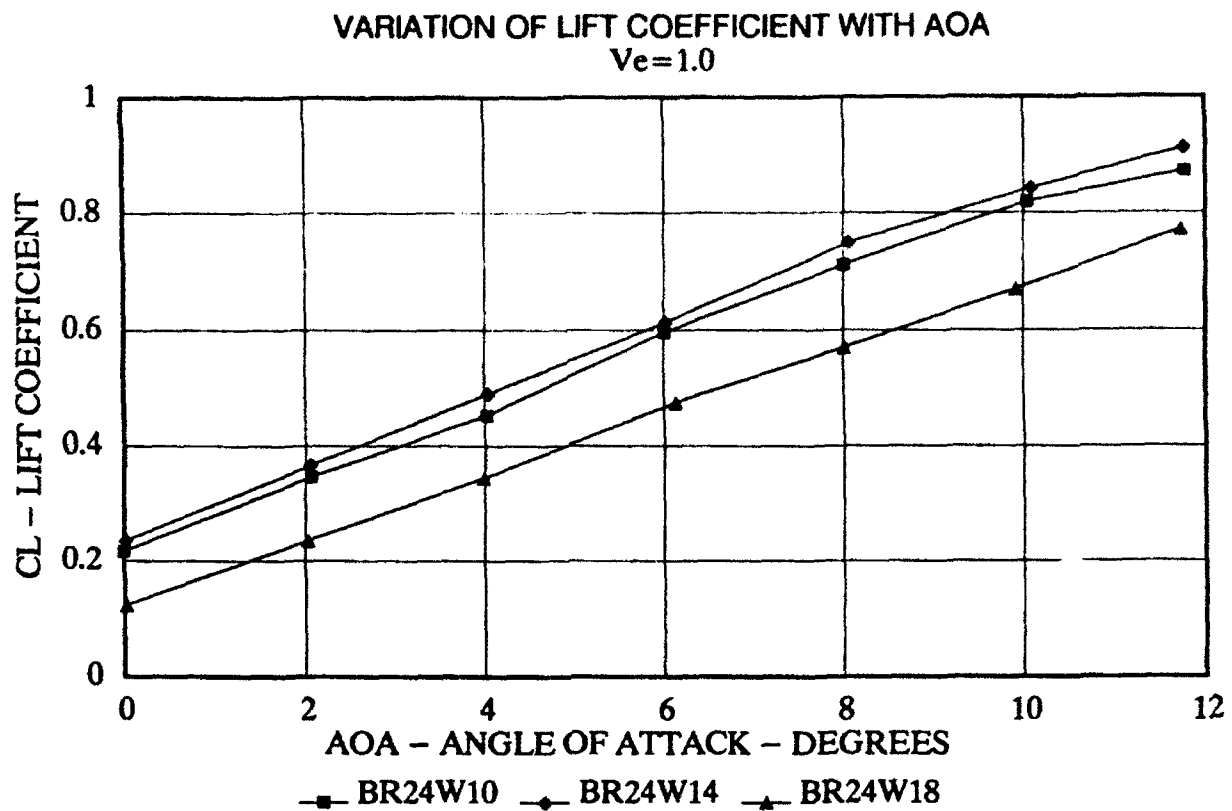
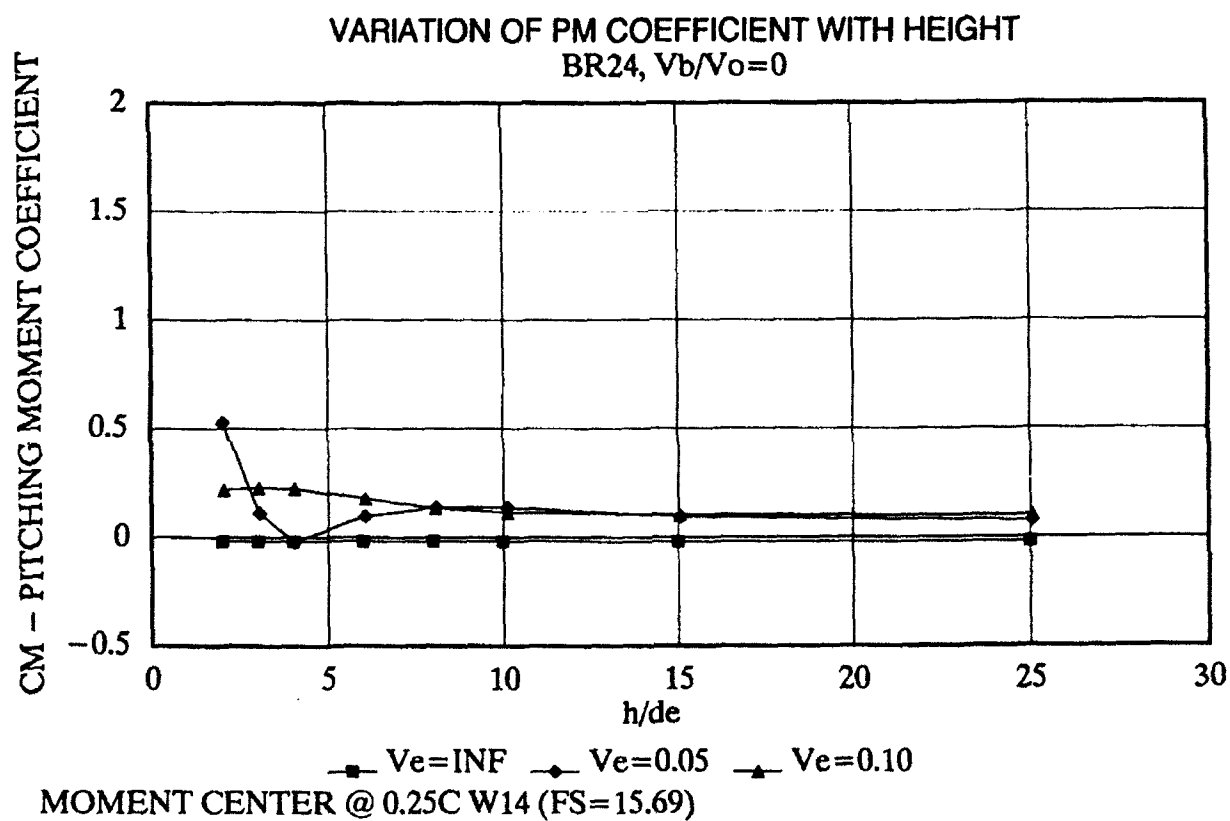
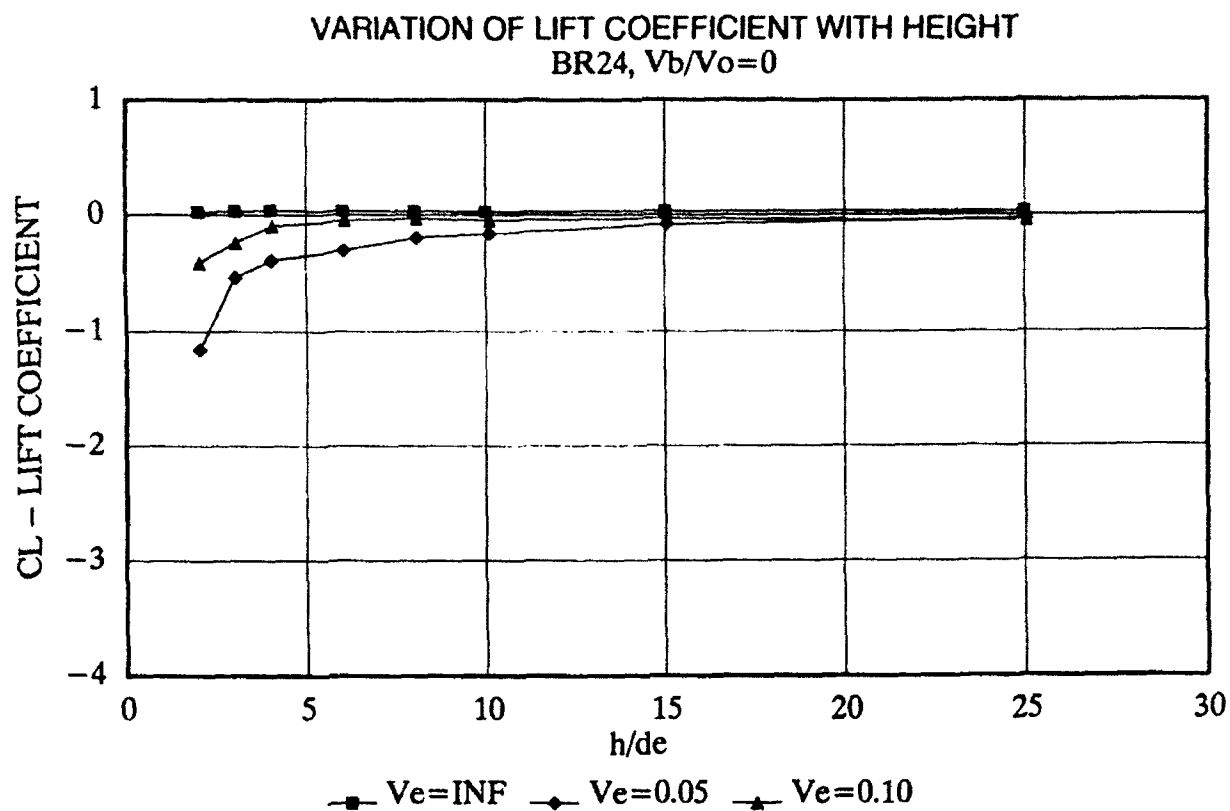


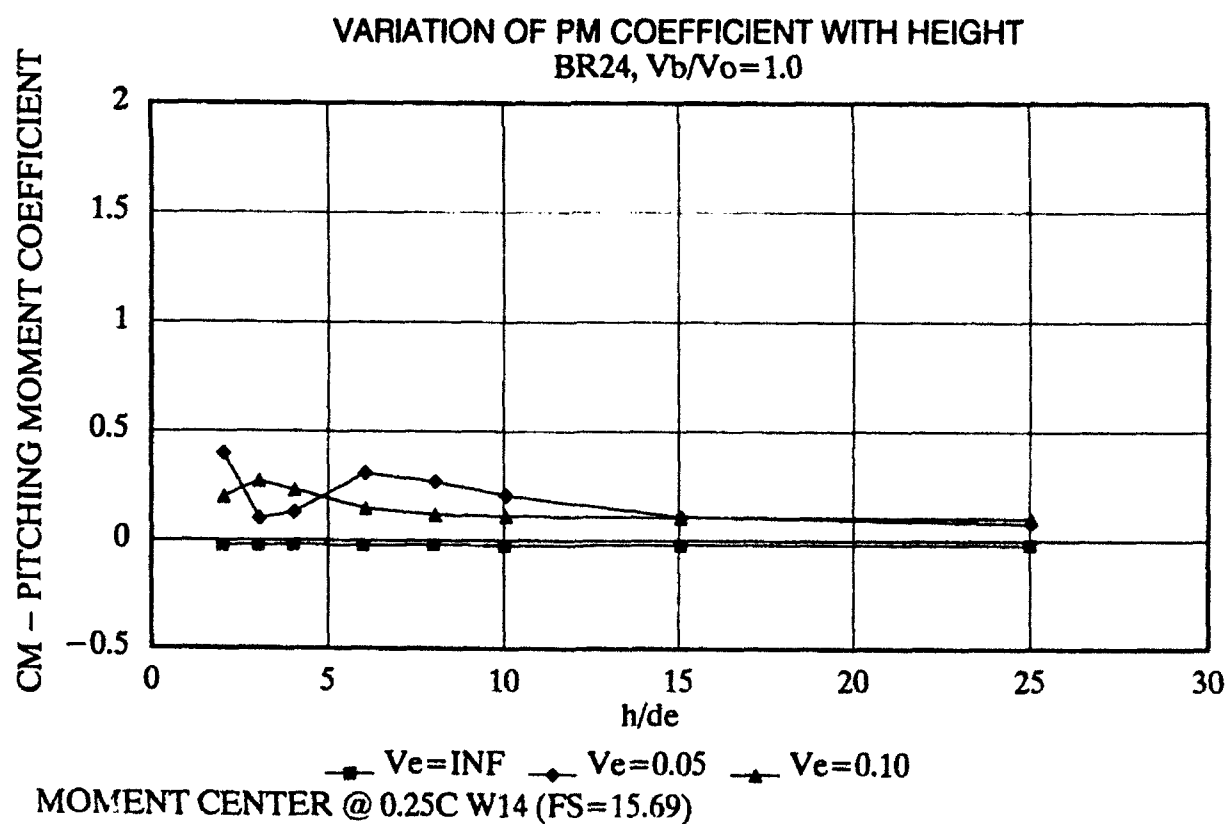
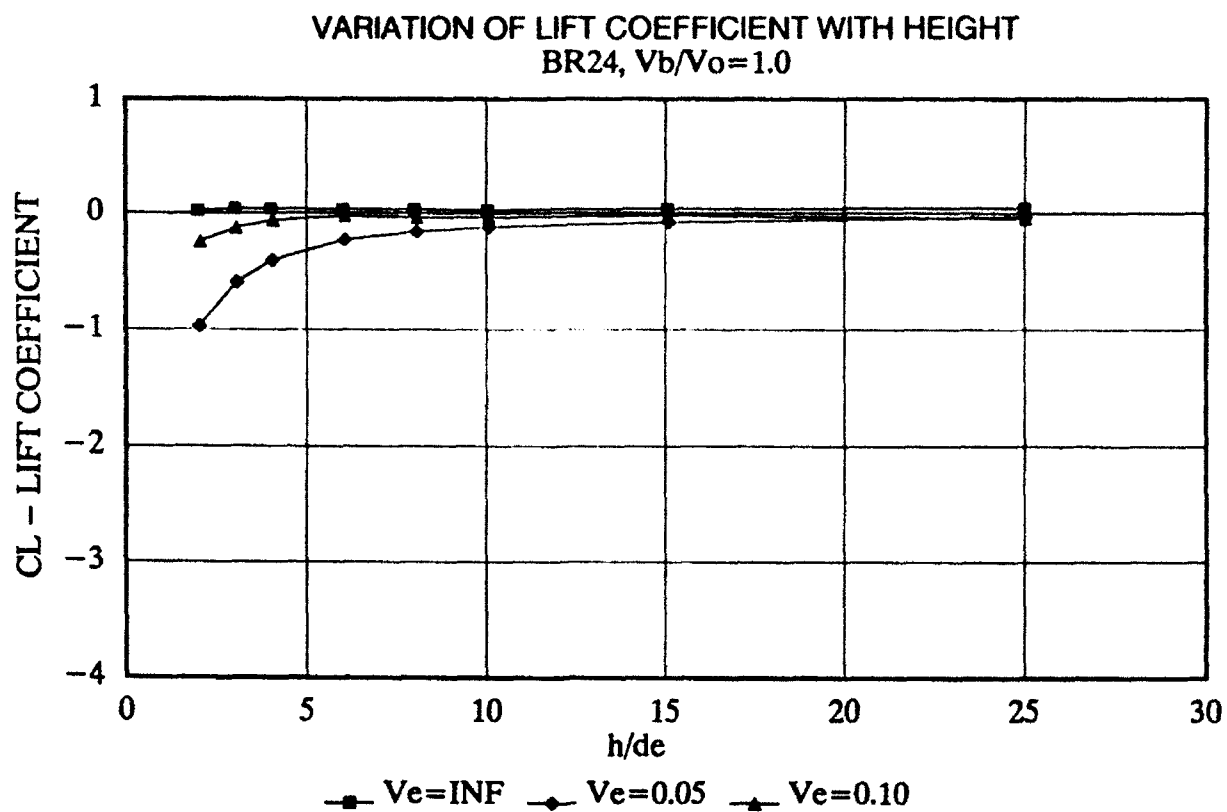
Figure 30. Variation of Aerodynamic Characteristics with Angle of Attack, Rectangular Nozzle,  $V_e=0$



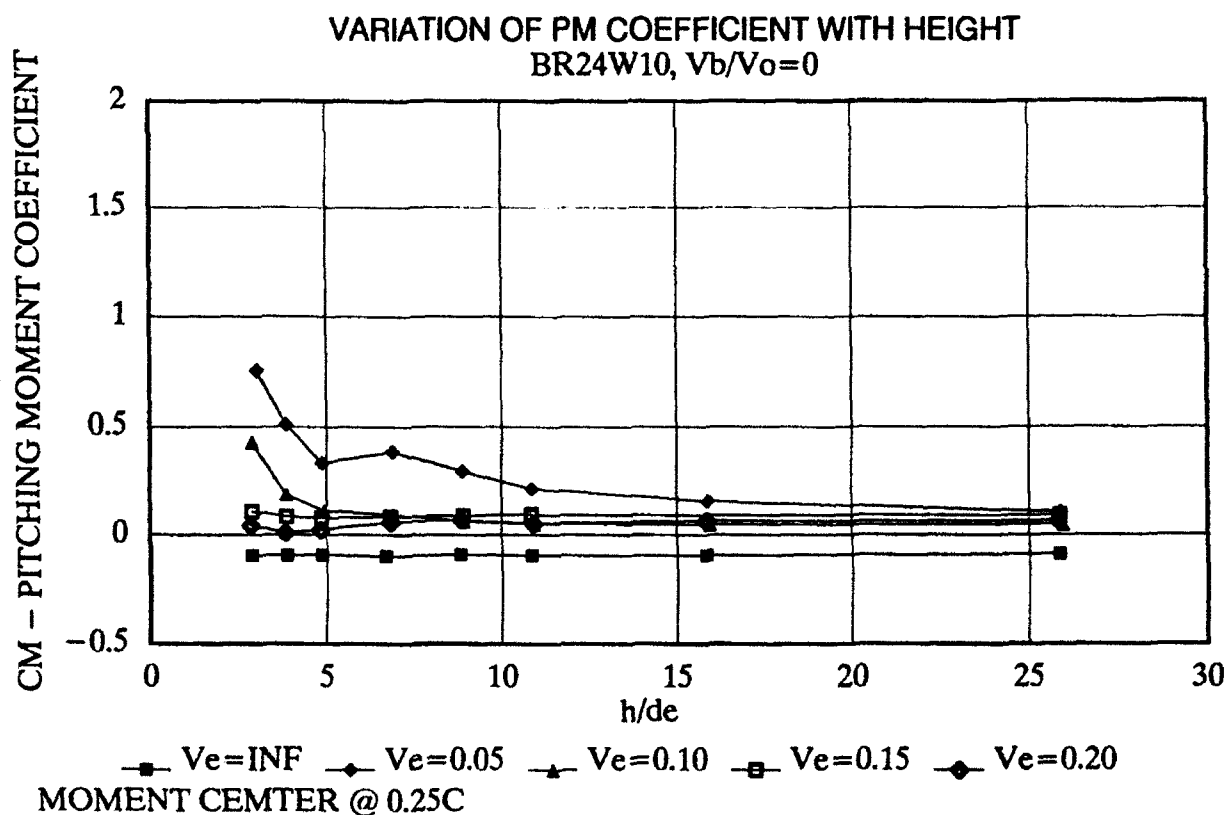
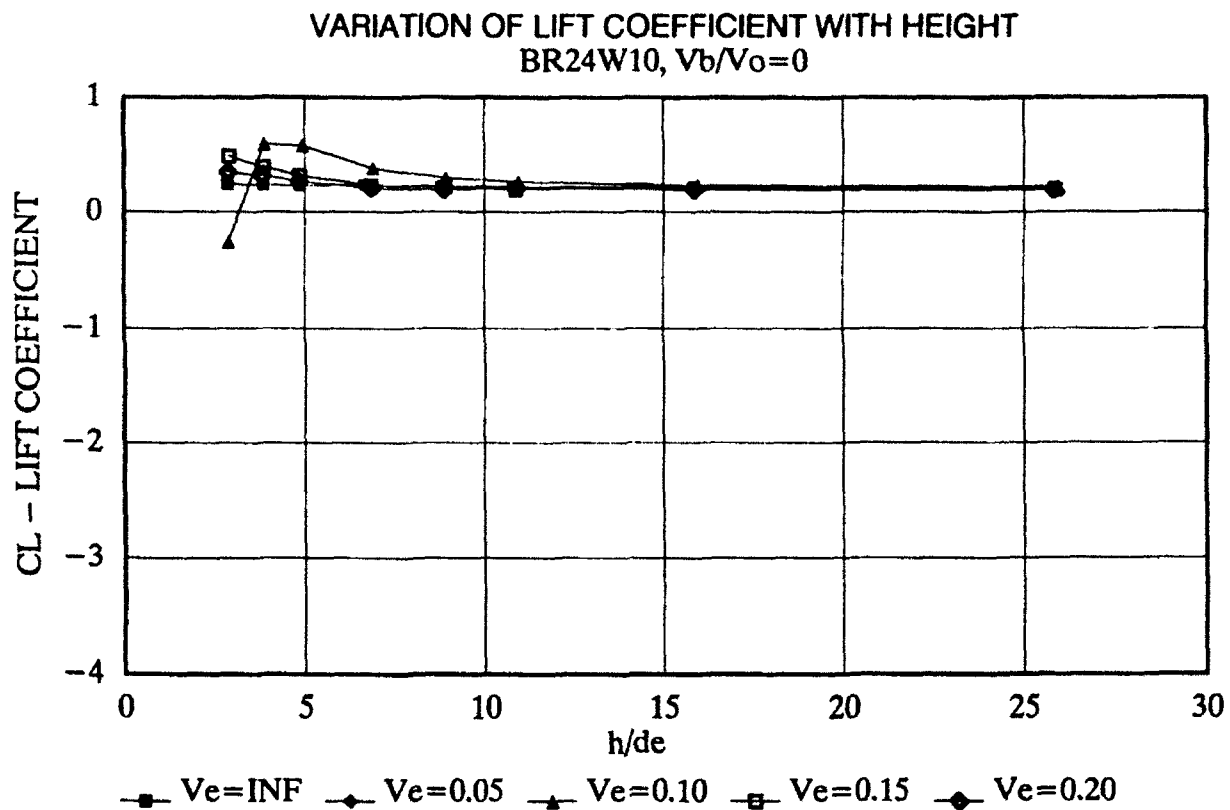
**Figure 31. Variation of Aerodynamic Characteristics with Angle of Attack, Rectangular Nozzle,  $V_e=0.1$**



**Figure 32. Variation of Aerodynamic Characteristics with Height,**  
BR24,  $V_b/V_o=0$

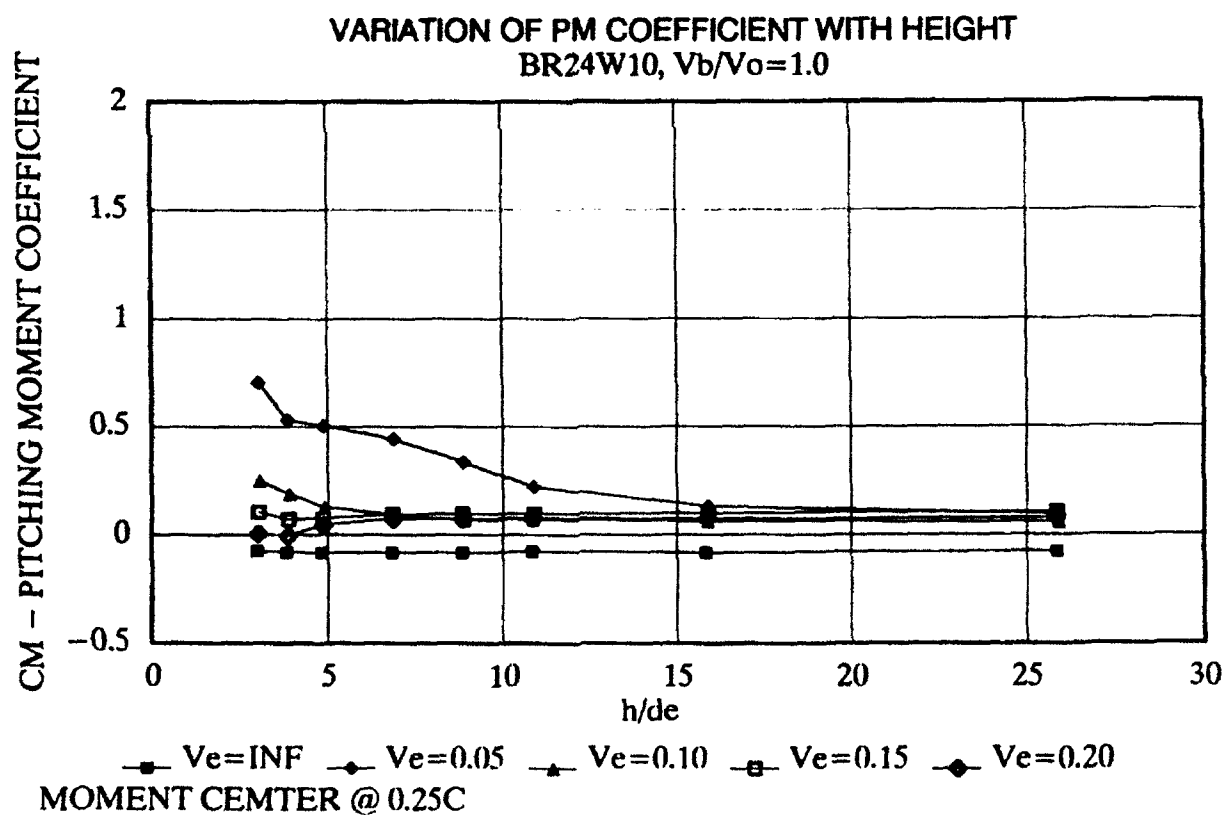
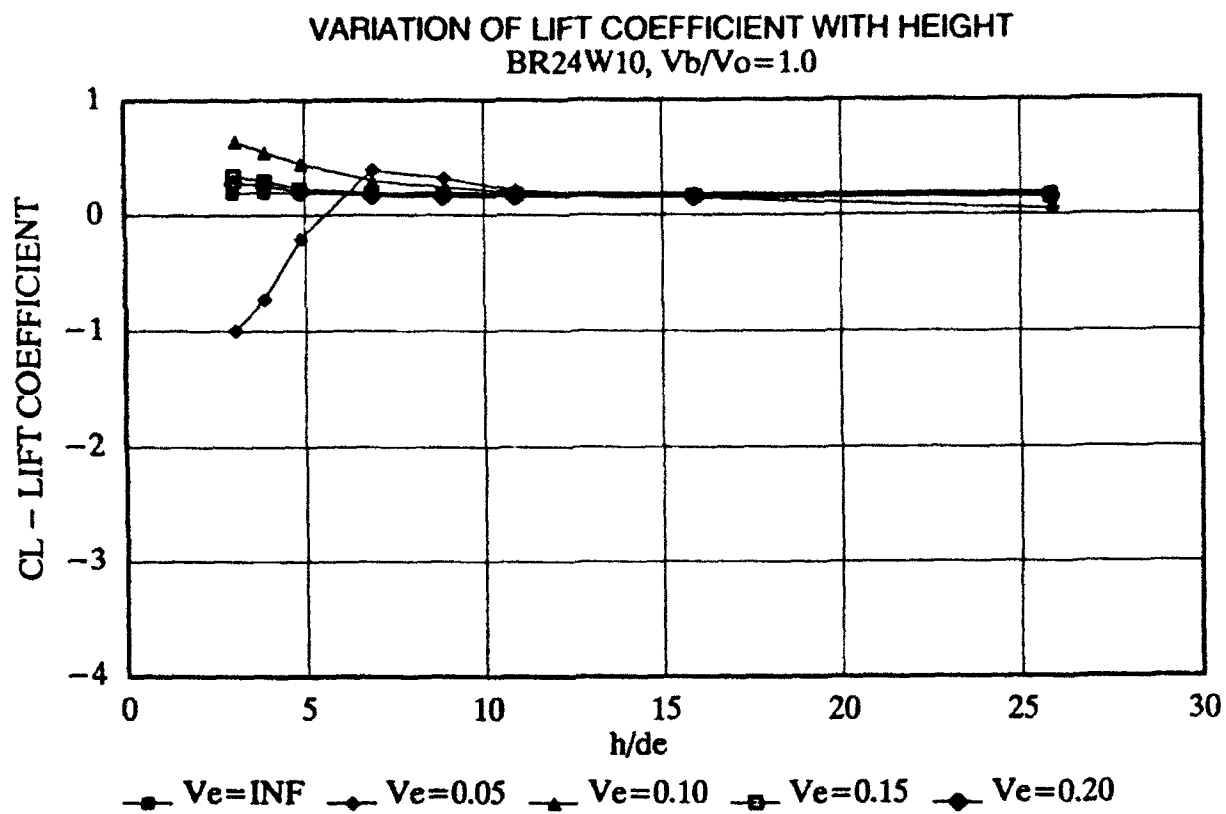


**Figure 33. Variation of Aerodynamic Characteristics with Height, BR24,  $V_b/V_o=1.0$**



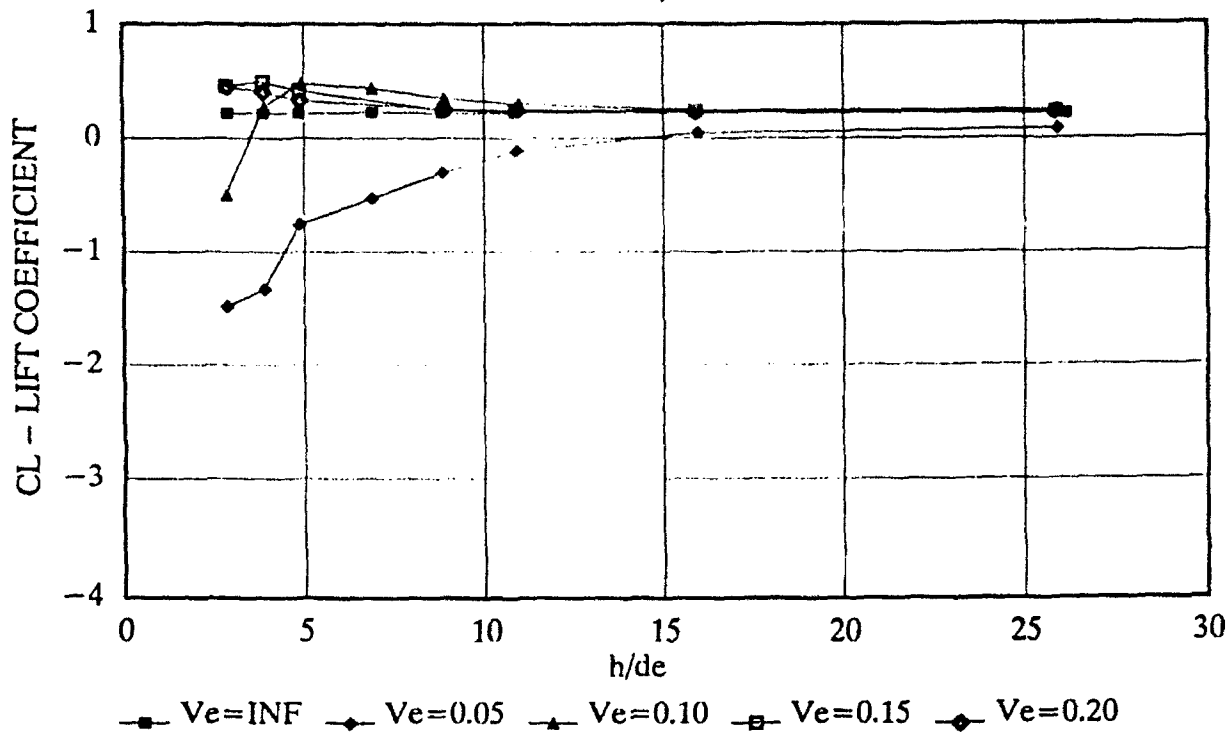
**Figure 34. Variation of Aerodynamic Characteristics with Height,**  
BR24W10,  $V_b/V_o=0$





**Figure 35. Variation of Aerodynamic Characteristics with Height,**  
BR24W10,  $V_b/V_o=1.0$

VARIATION OF LIFT COEFFICIENT WITH HEIGHT  
BR24W14,  $V_b/V_o=0$



VARIATION OF PM COEFFICIENT WITH HEIGHT  
BR24W14,  $V_b/V_o=0$

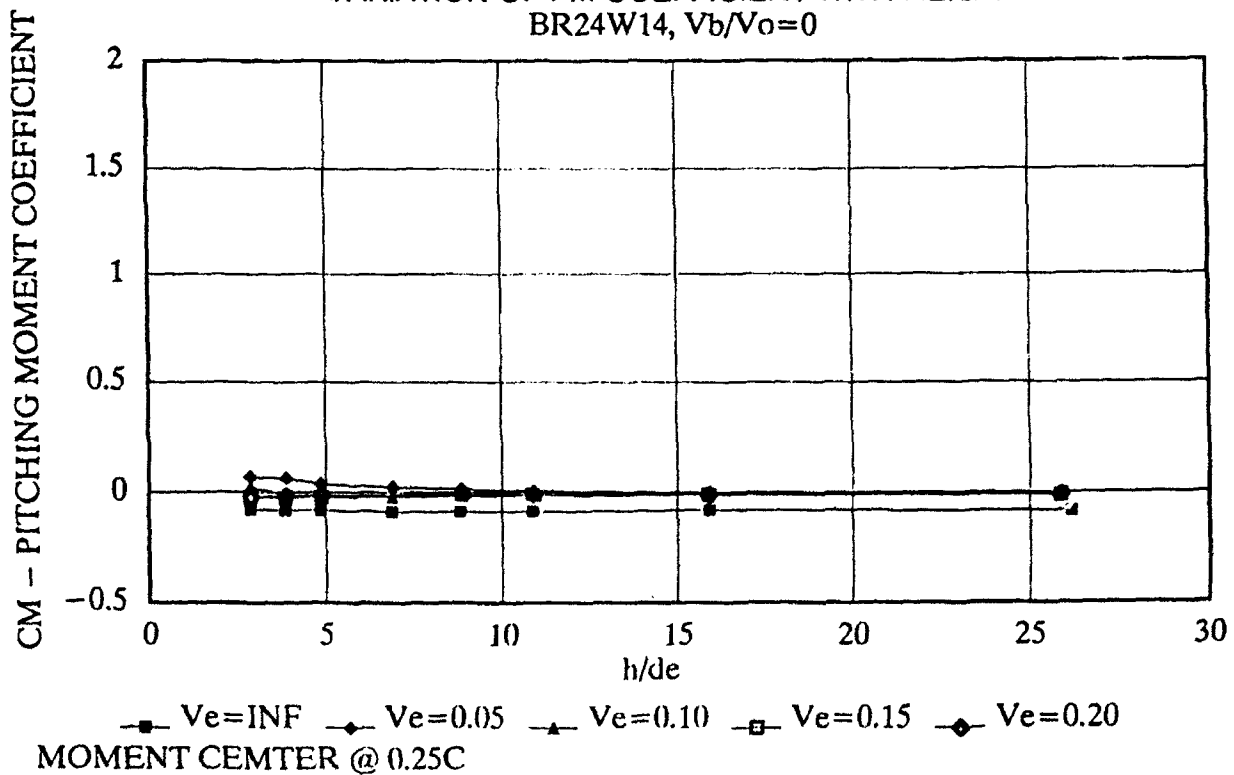
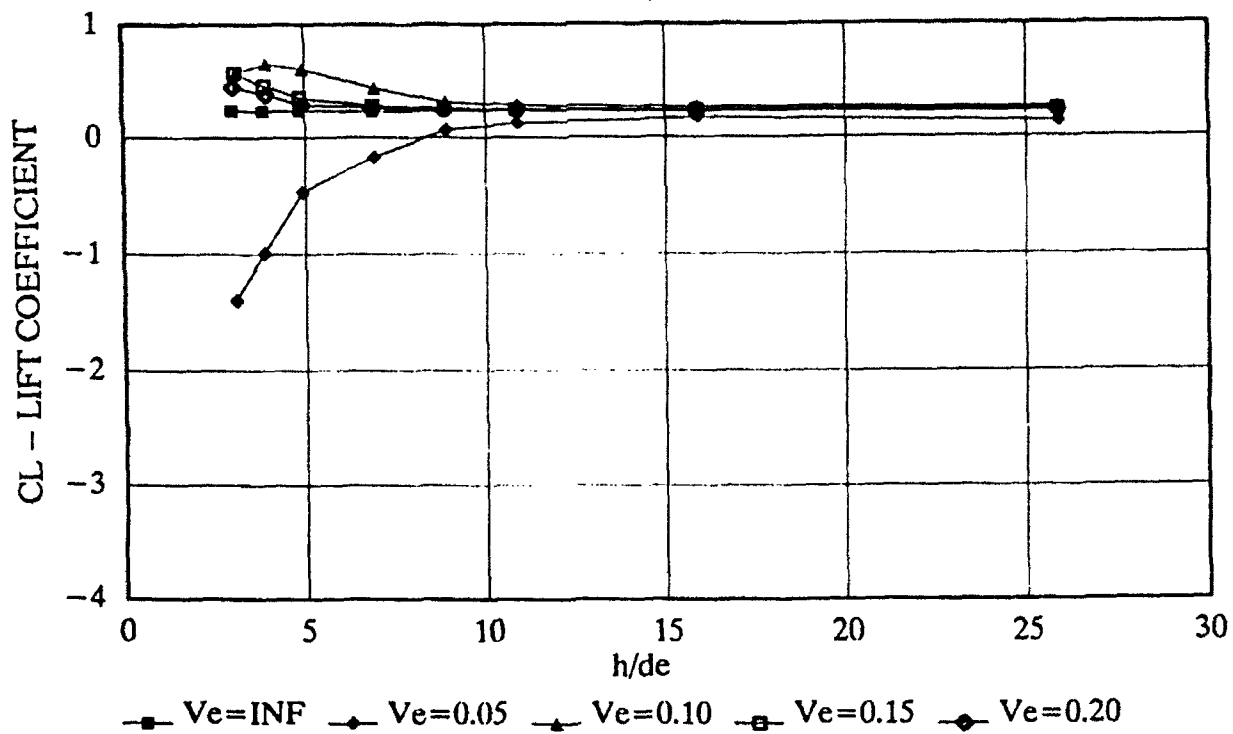


Figure 36. Variation of Aerodynamic Characteristics with Height,  
BR24W14,  $V_b/V_o=0$

VARIATION OF LIFT COEFFICIENT WITH HEIGHT  
BR24W14,  $V_b/V_o=1.0$



VARIATION OF PM COEFFICIENT WITH HEIGHT  
BR24W14,  $V_b/V_o=1.0$

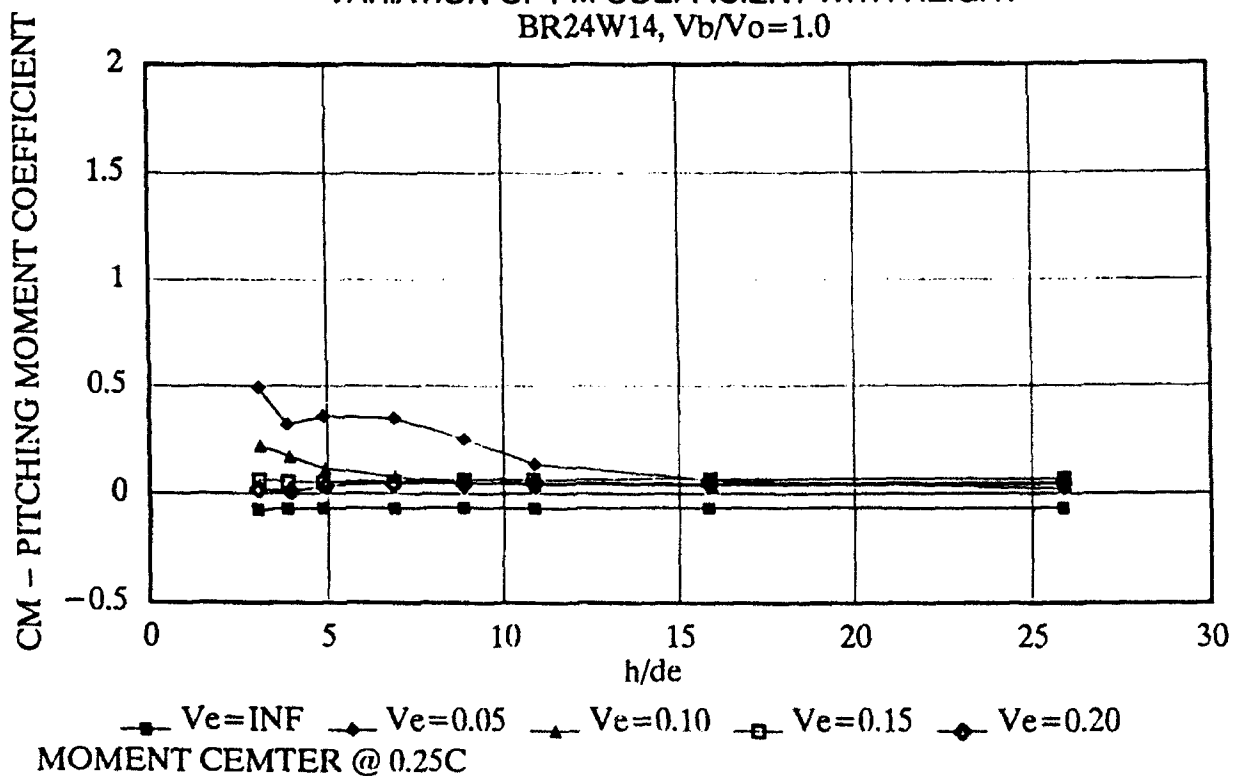
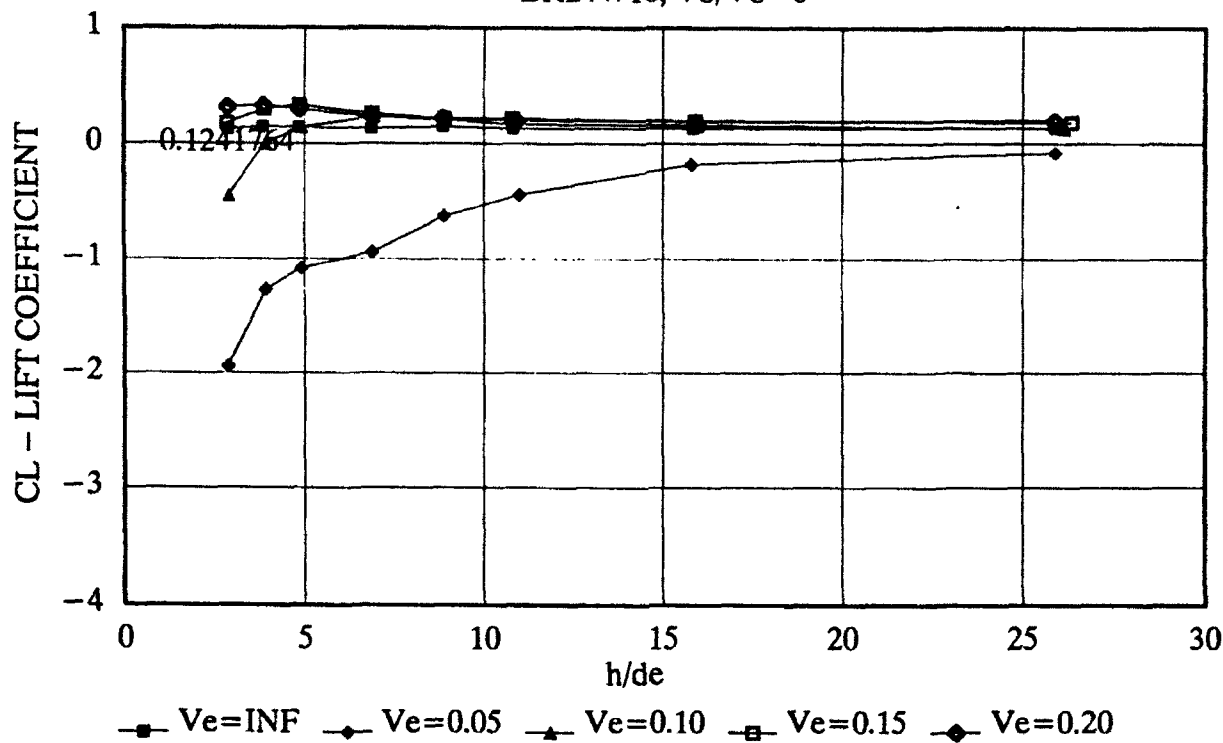


Figure 37. Variation of Aerodynamic Characteristics with Height,  
BR24W14,  $V_b/V_o=1.0$

VARIATION OF LIFT COEFFICIENT WITH HEIGHT  
BR24W18,  $V_b/V_o=0$



VARIATION OF PM COEFFICIENT WITH HEIGHT  
BR24W18,  $V_b/V_o=0$

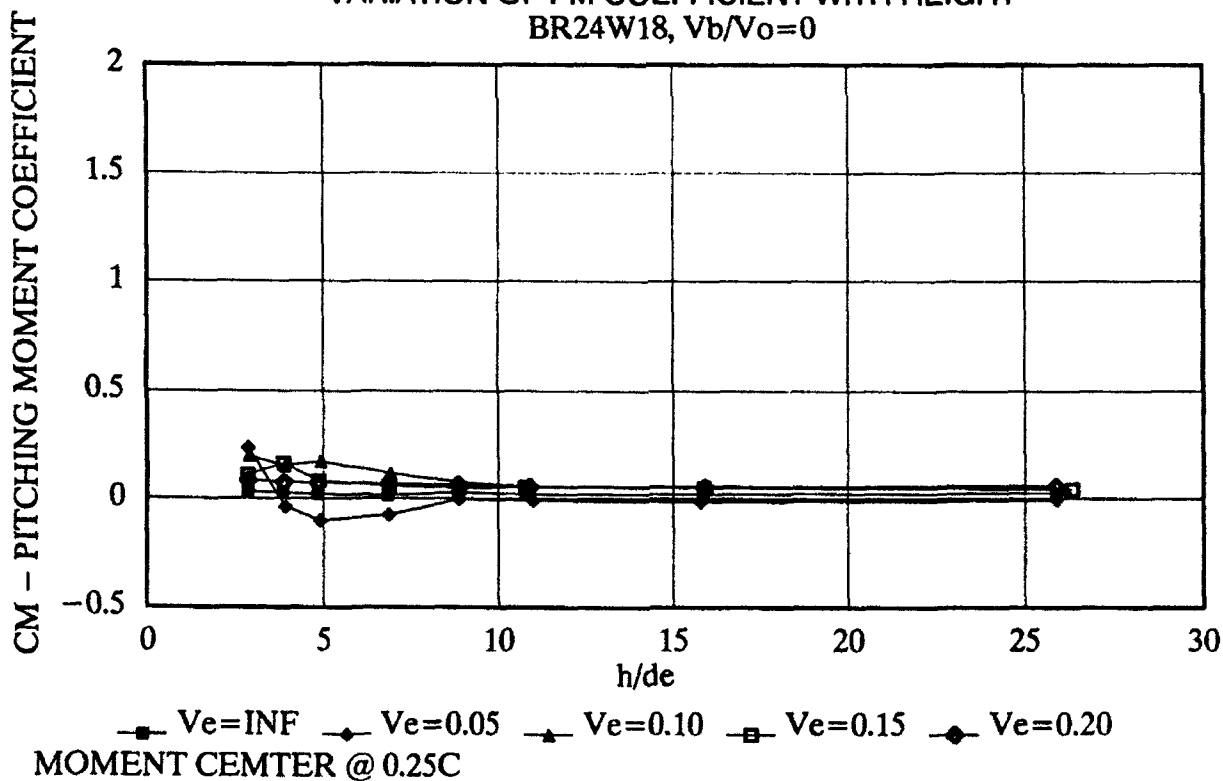


Figure 38. Variation of Aerodynamic Characteristics with Height,  
BR24W18,  $V_b/V_o=0$

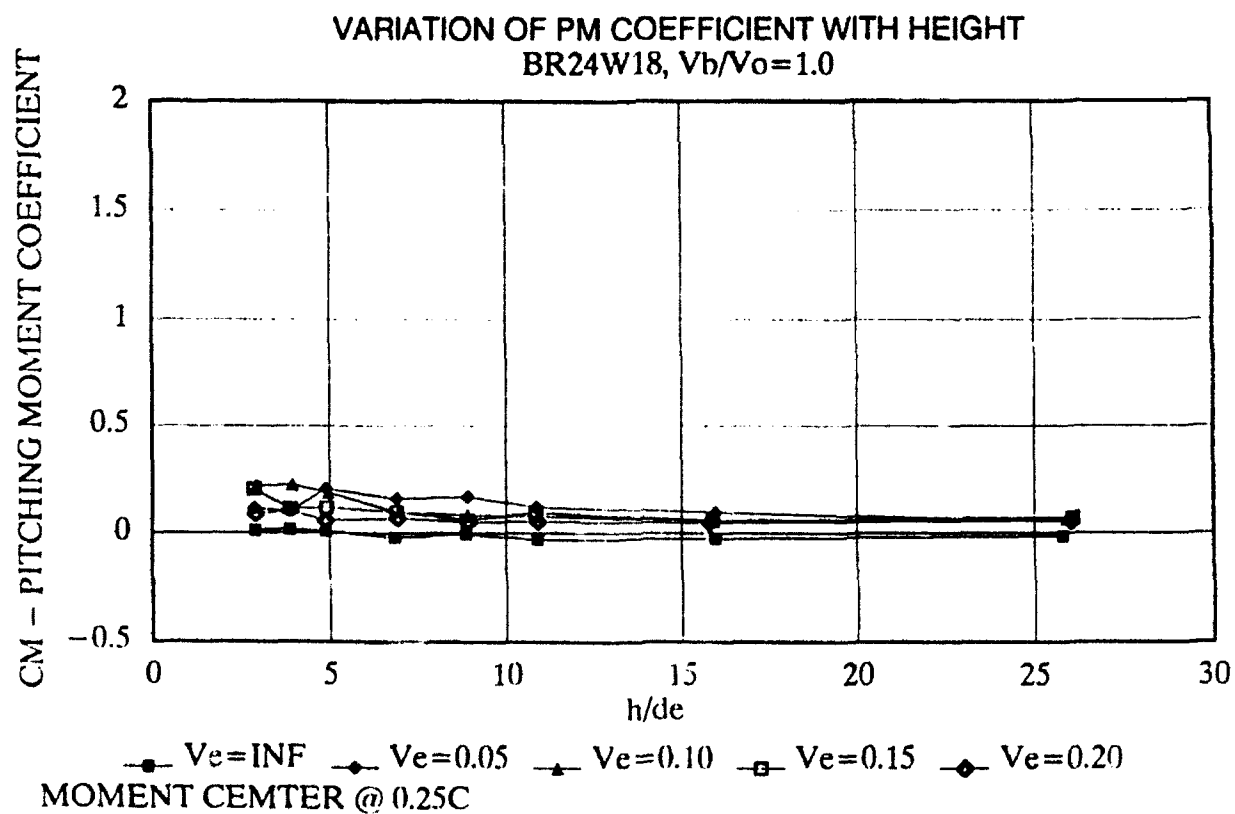
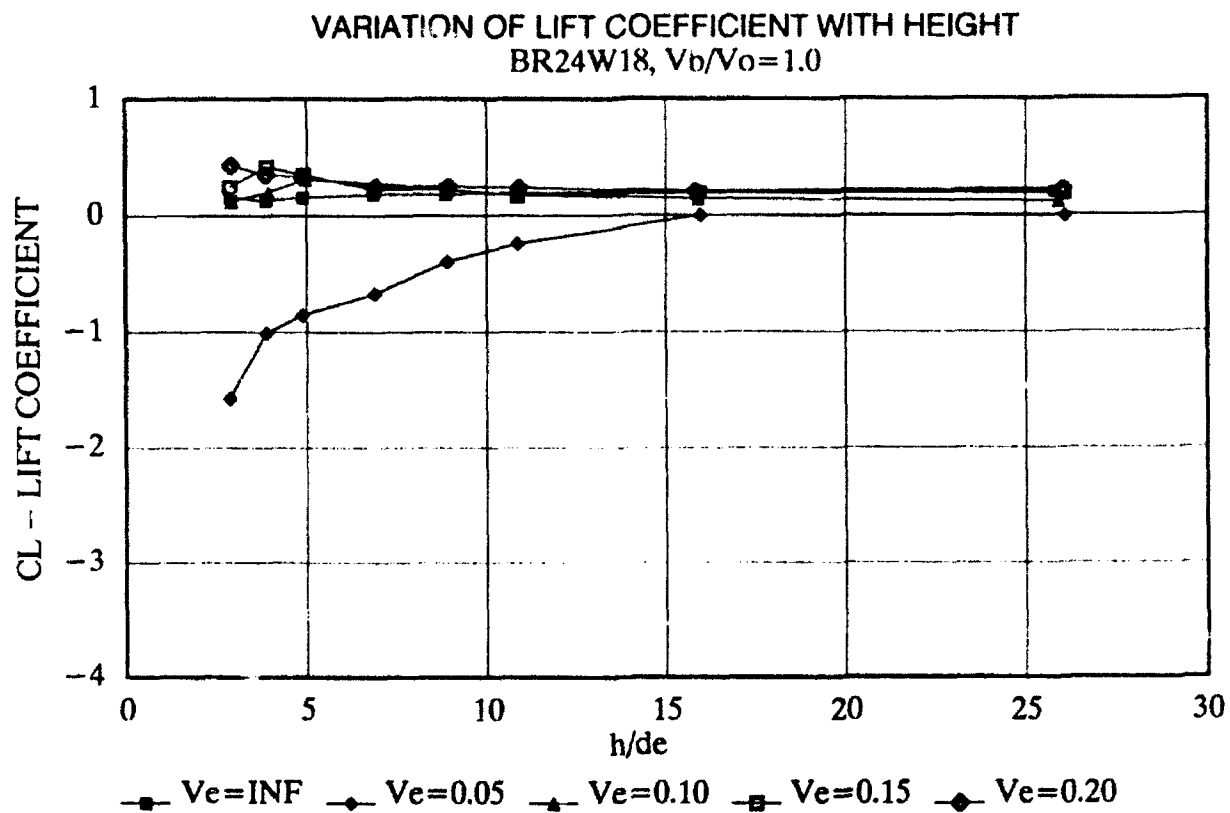
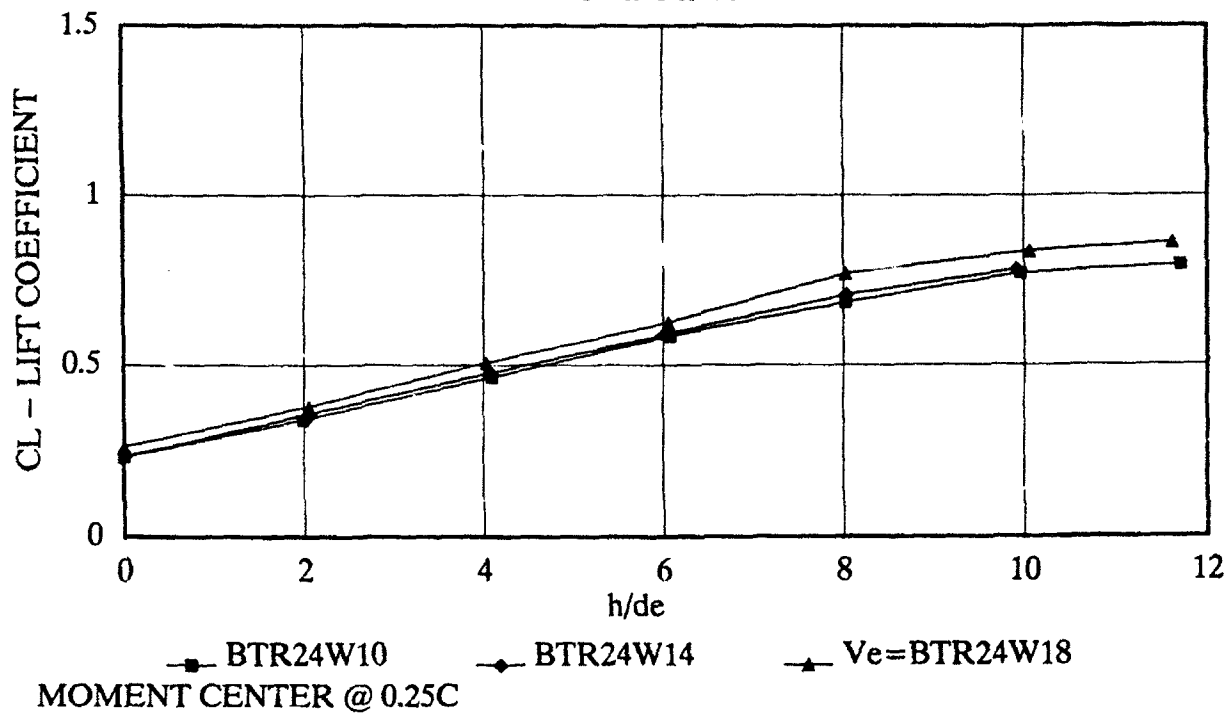


Figure 39. Variation of Aerodynamic Characteristics with Height, BR24W18,  $V_b/V_o=1.0$

# VARIATION OF LIFT COEFFICIENT

$V_e = \text{INFINITY}$



## VARIATION OF PITCHING MOMENT COEFFICIENT

$V_e = \text{INFINITY}$

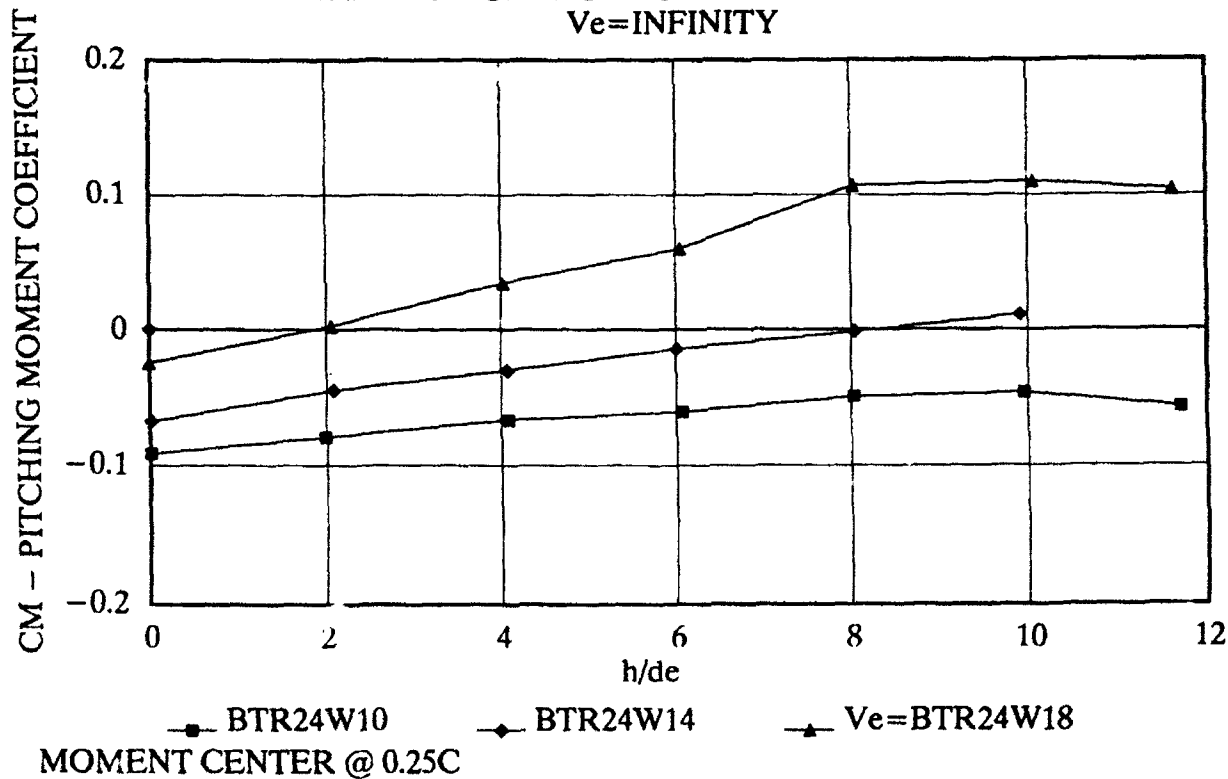
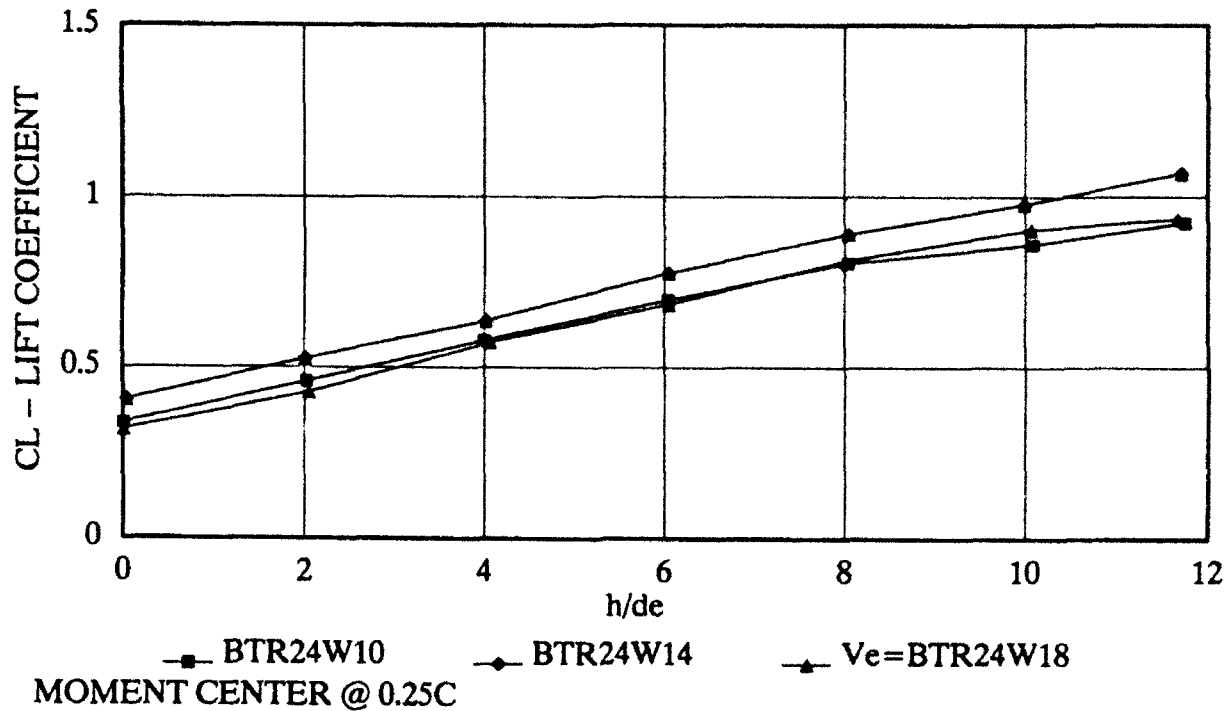


Figure 40. Variation of Aerodynamic Characteristics with Angle of Attack, Thrust Reverser Nozzle,  $V_e = 0$

# VARIATION OF LIFT COEFFICIENT

$V_e = 1.0$



## VARIATION OF PITCHING MOMENT COEFFICIENT

$V_e = 0.10$

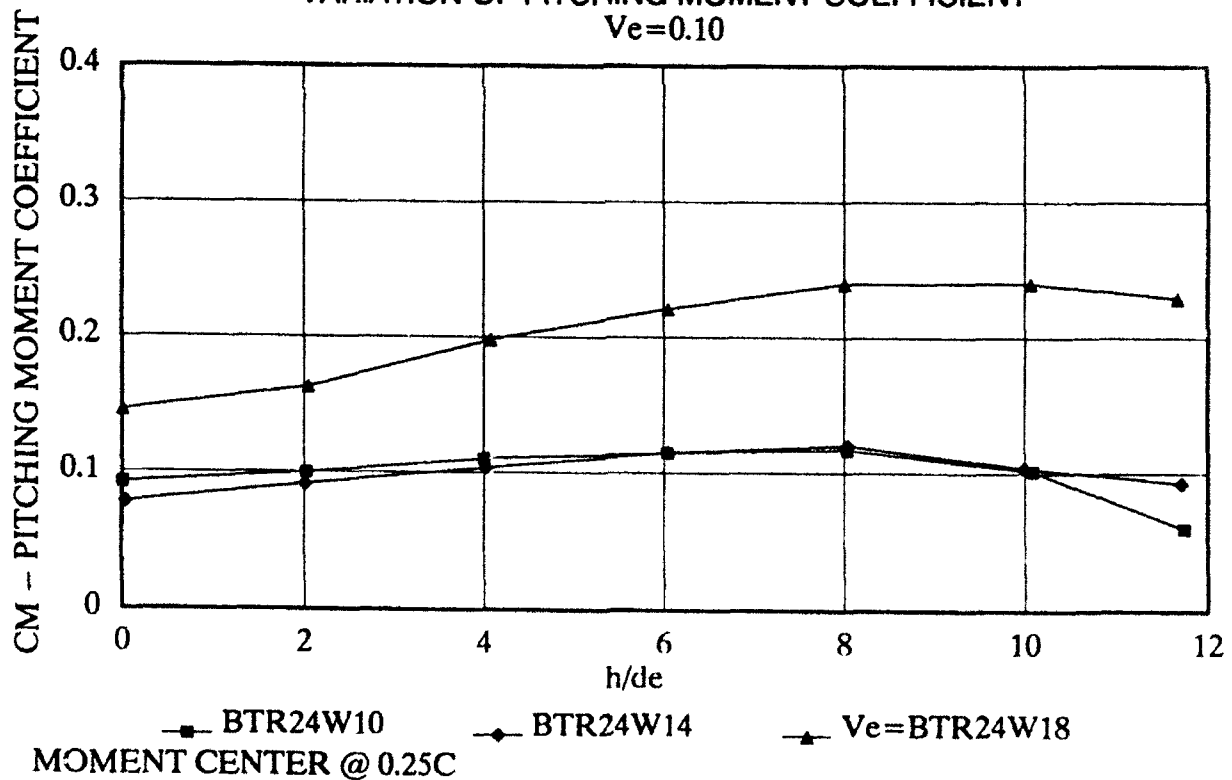
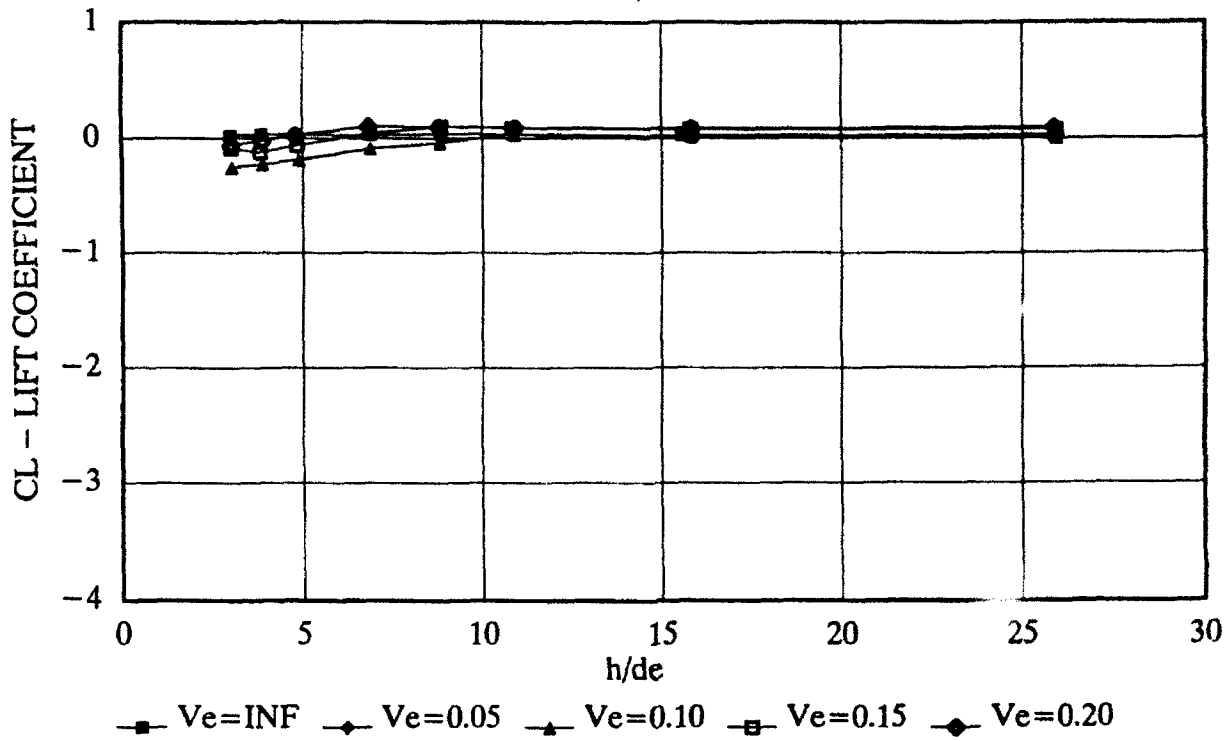


Figure 41. Variation of Aerodynamic Characteristics with Angle of Attack, Thrust Reverser,  $V_e = 0.1$

VARIATION OF LIFT COEFFICIENT WITH HEIGHT  
BTR24,  $V_b/V_o=0$



VARIATION OF PM COEFFICIENT WITH HEIGHT  
BTR24,  $V_b/V_o=0$

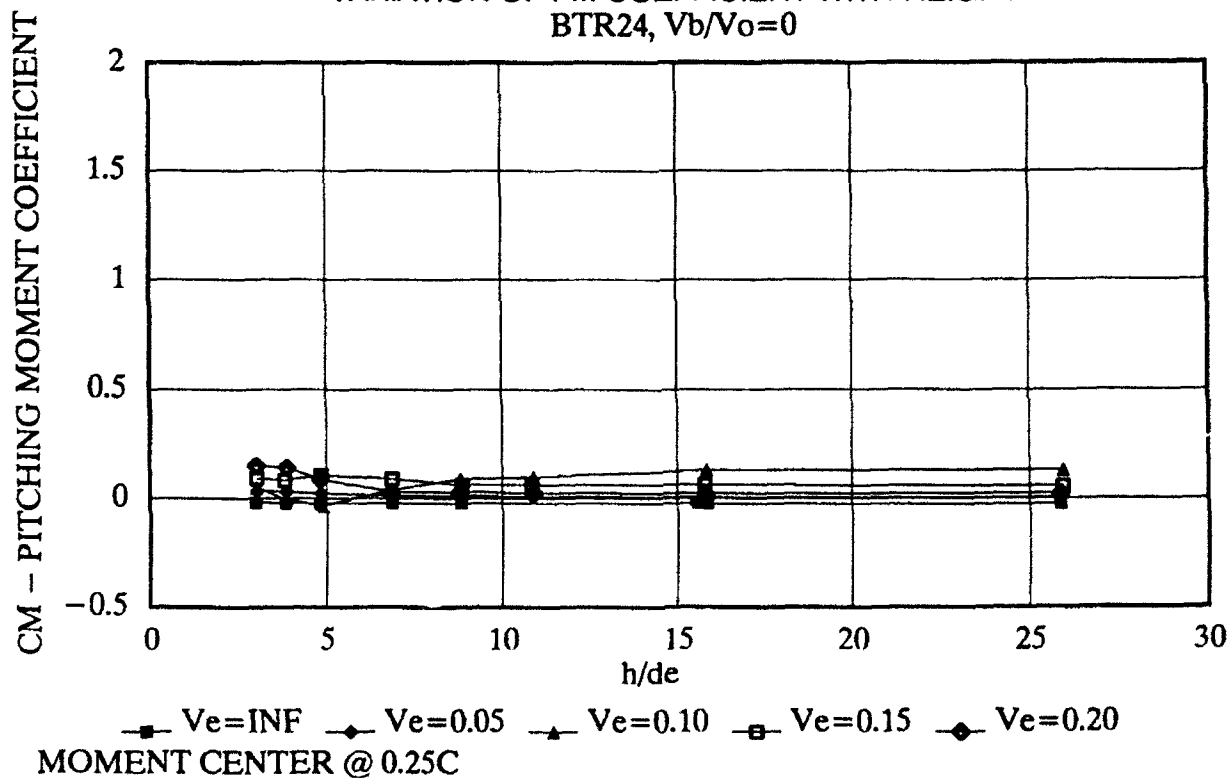


Figure 42. Variation of Aerodynamic Characteristics with Height,  
BTR24,  $V_b/V_o=0$



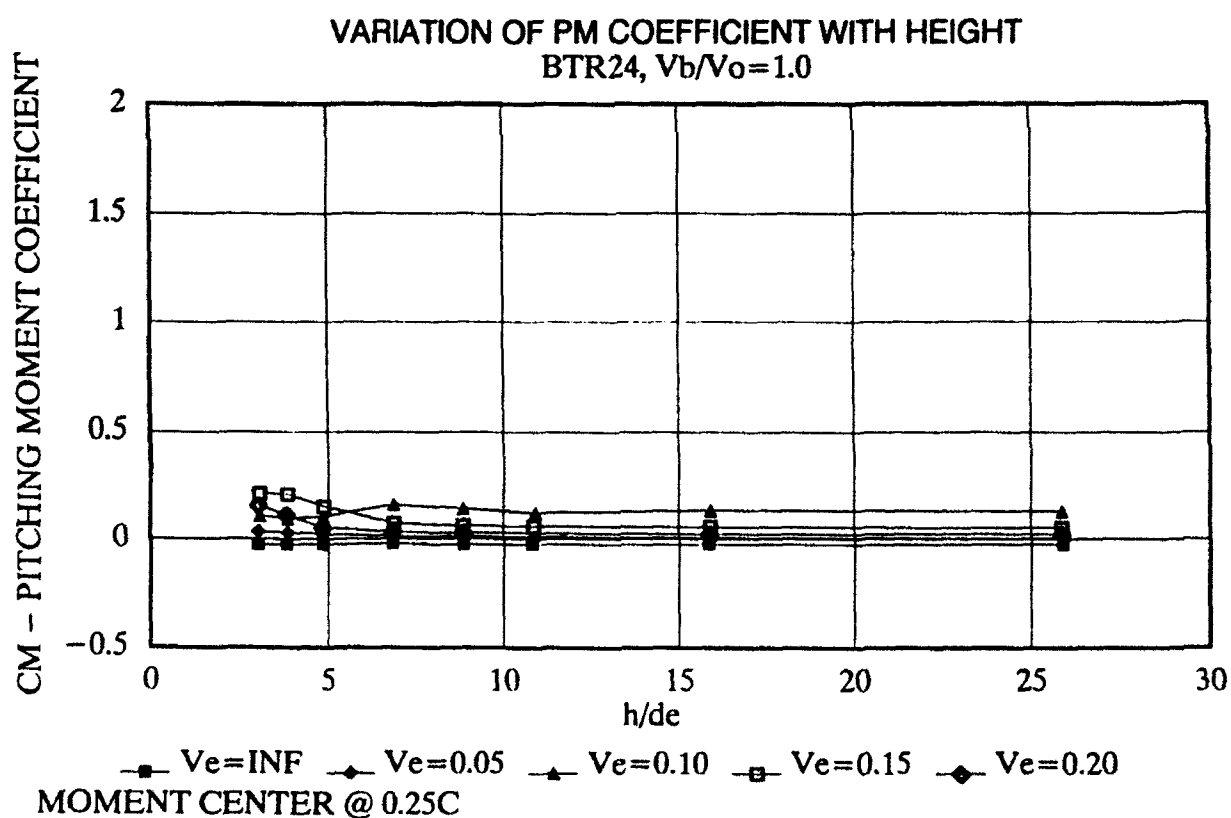
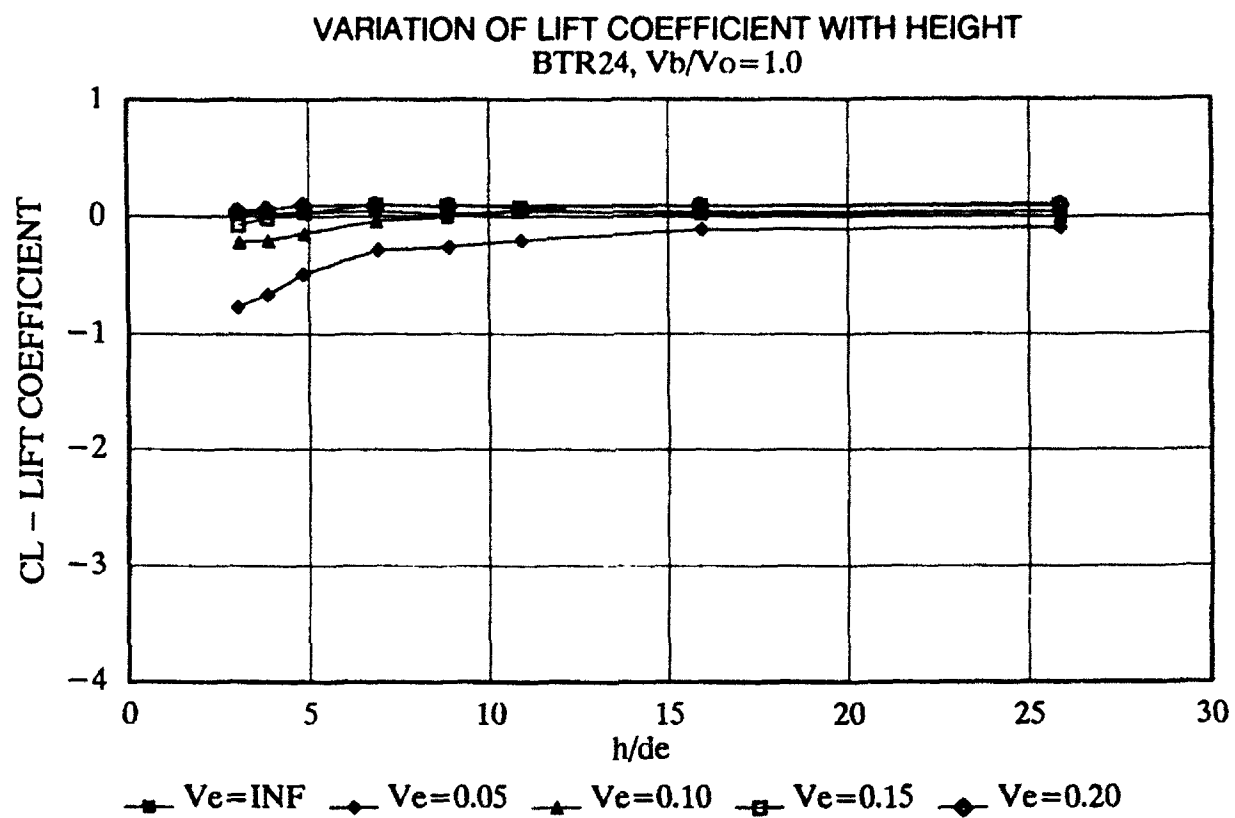
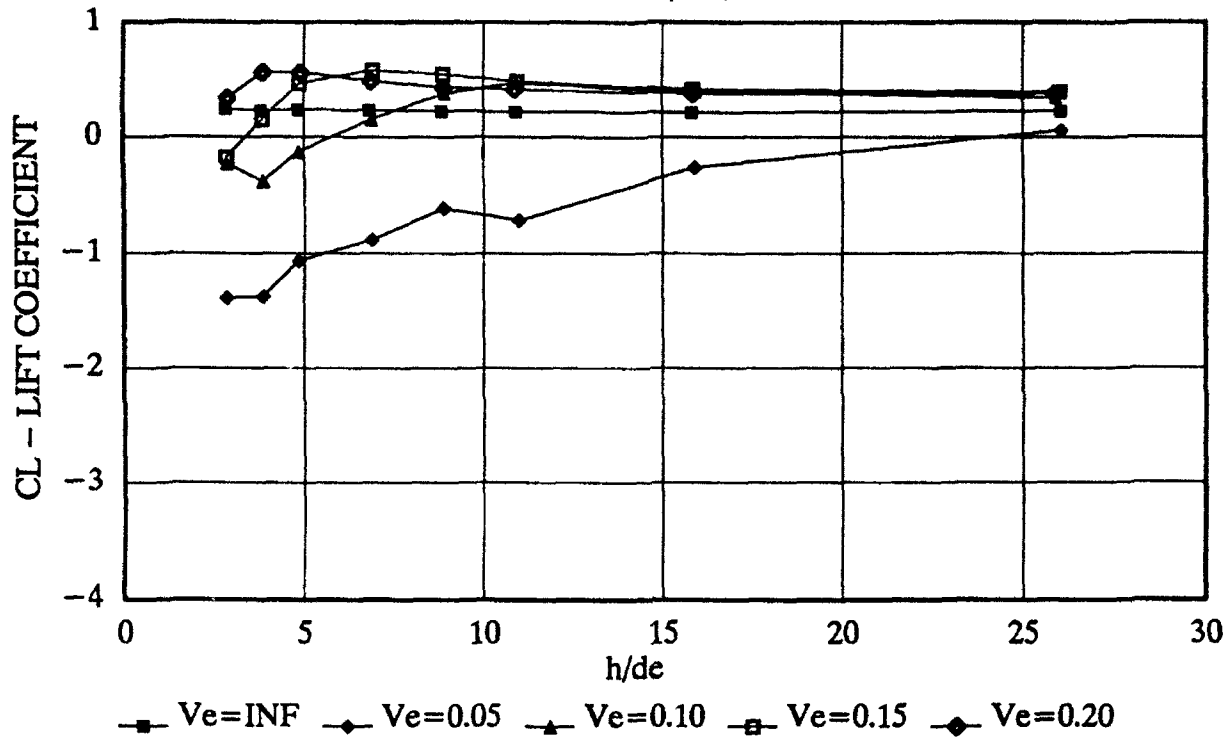


Figure 43. Variation of Aerodynamic Characteristics with Height,  
BTR24,  $V_b/V_o=1.0$

VARIATION OF LIFT COEFFICIENT WITH HEIGHT  
BTR24W10,  $V_b/V_o=0$



VARIATION OF PM COEFFICIENT WITH HEIGHT  
BTR24W10,  $V_b/V_o=1.0$

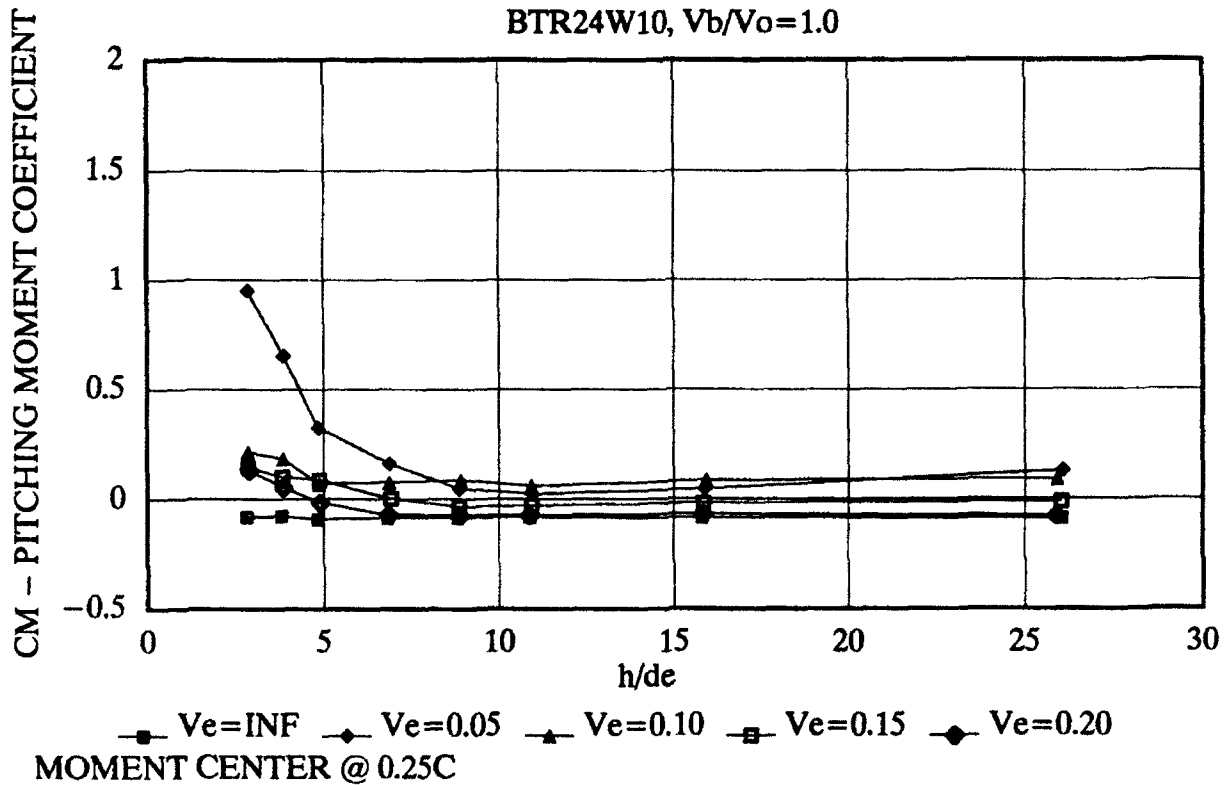


Figure 44. Variation of Aerodynamic Characteristics with Height,  
BTR24W10,  $V_b/V_o=0$

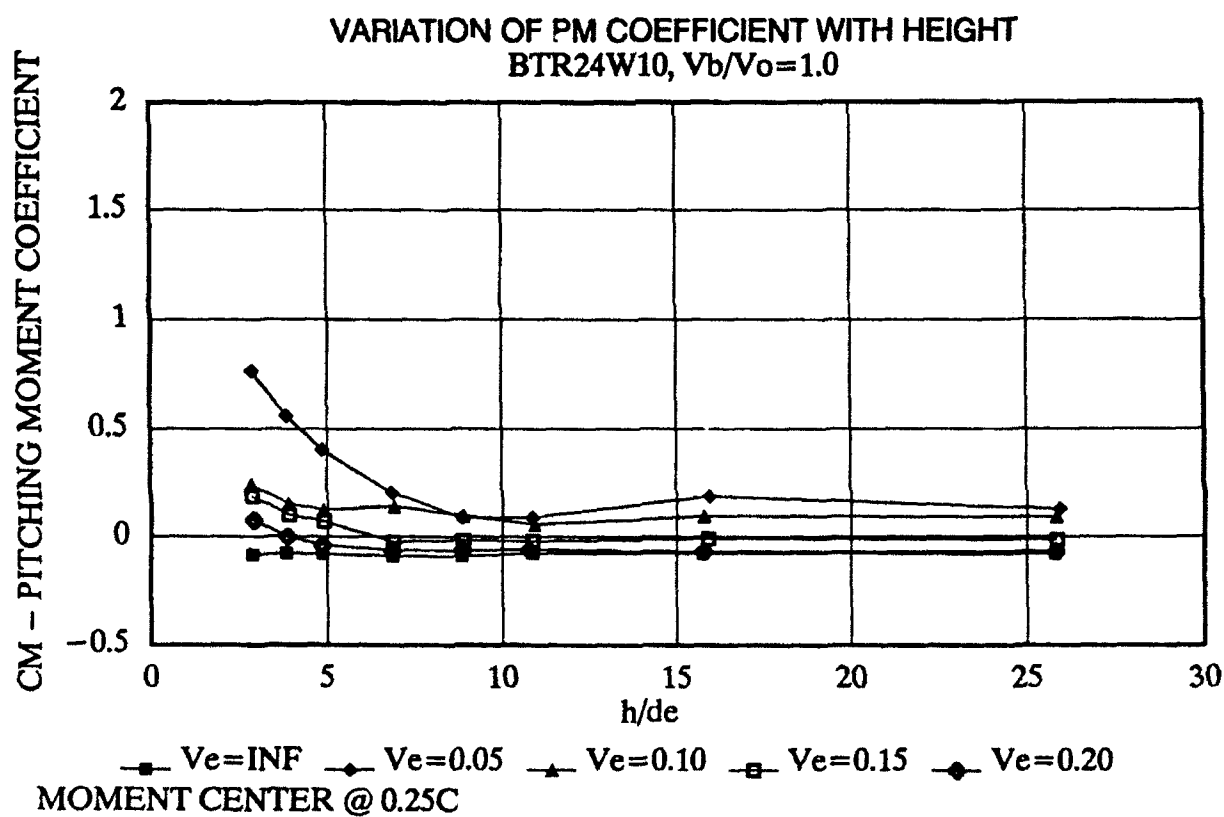
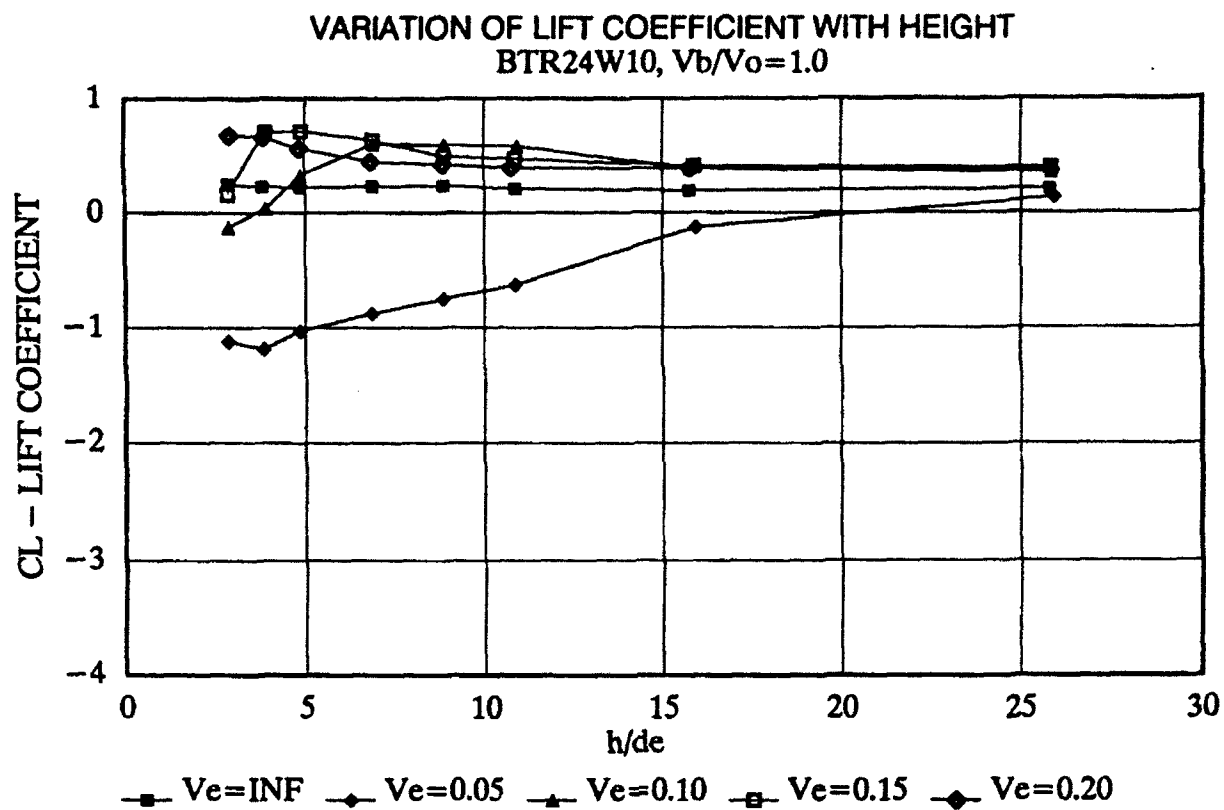


Figure 45. Variation of Aerodynamic Characteristics with Height,  
BTR24W10,  $V_b/V_o=1.0$

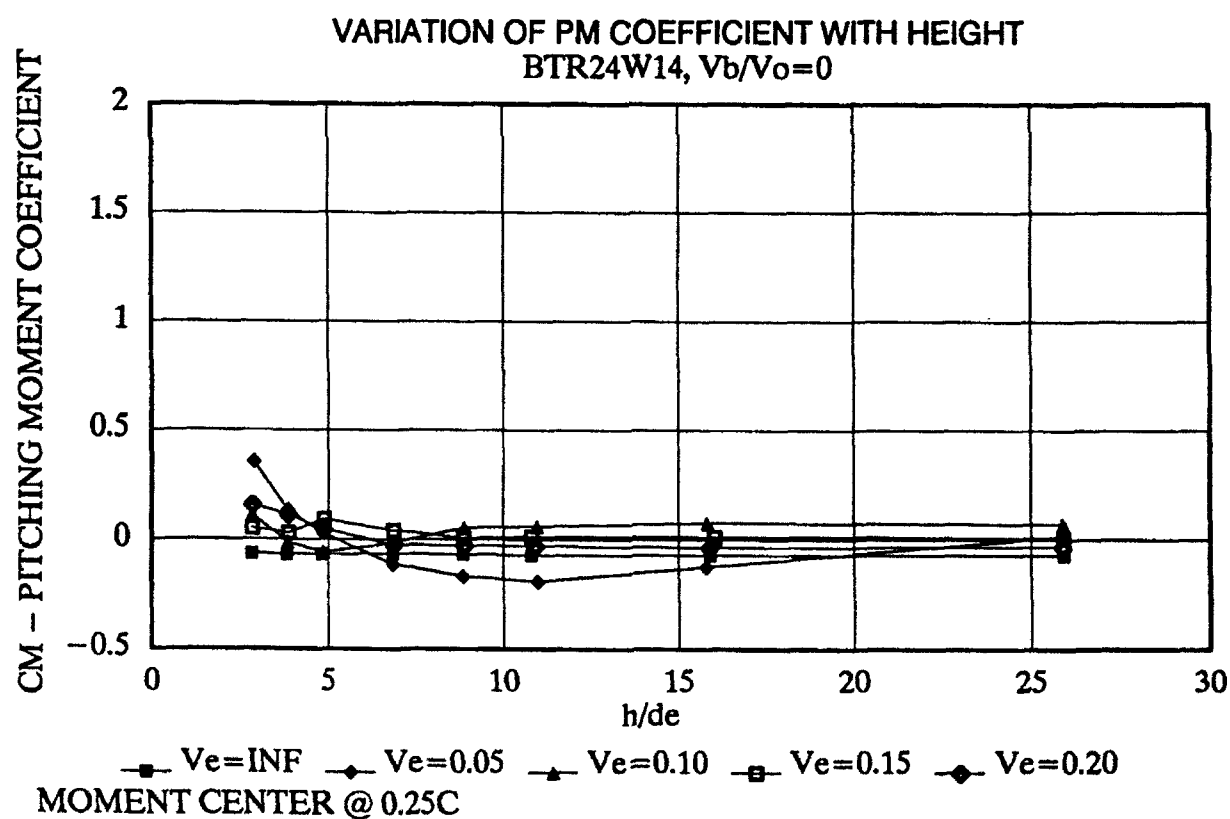
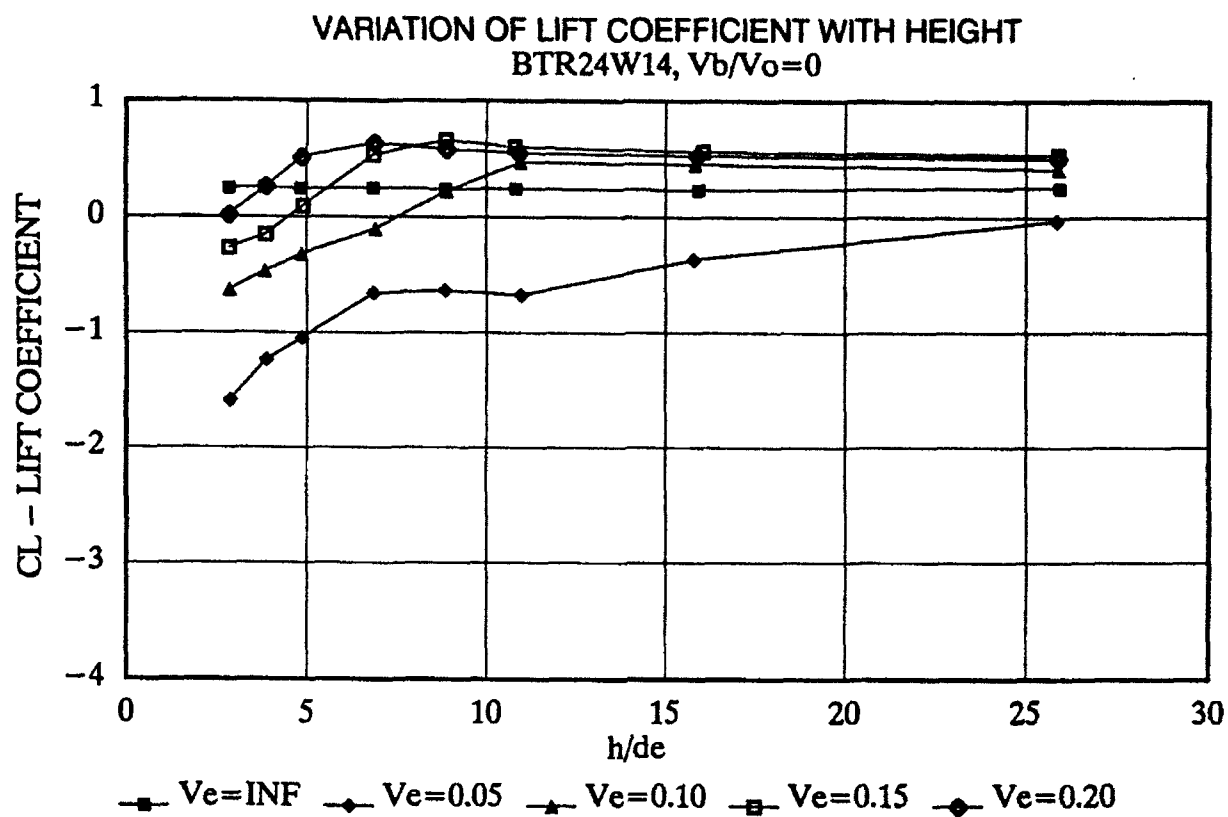


Figure 46. Variation of Aerodynamic Characteristics with Height,  
BTR24W14,  $V_b/V_o=0$

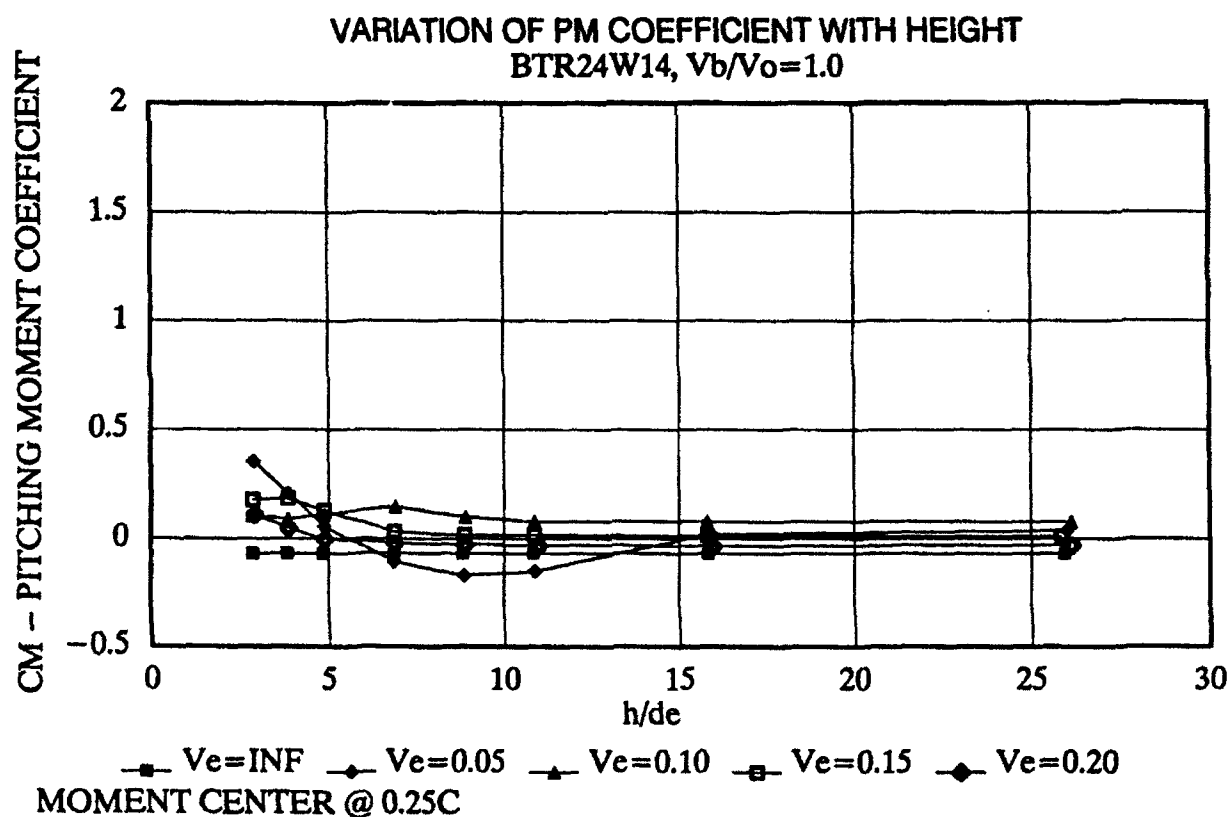
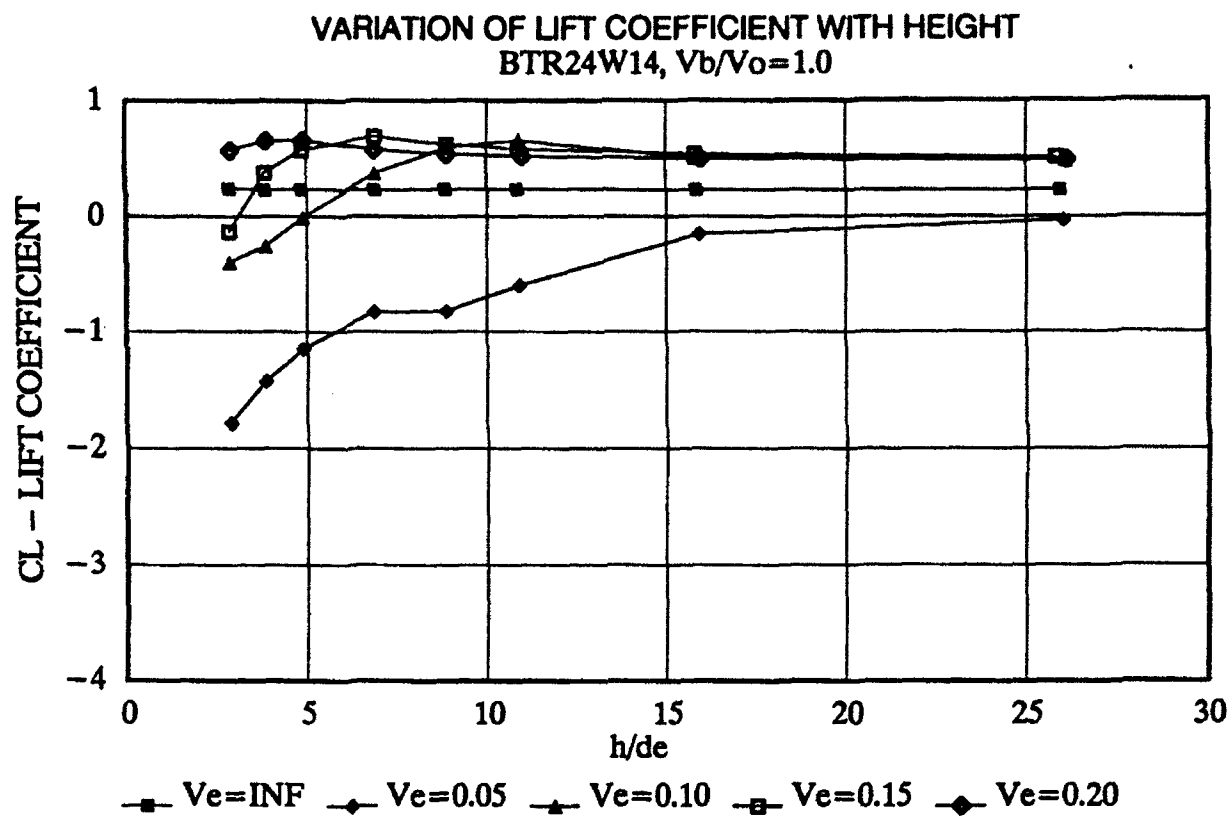
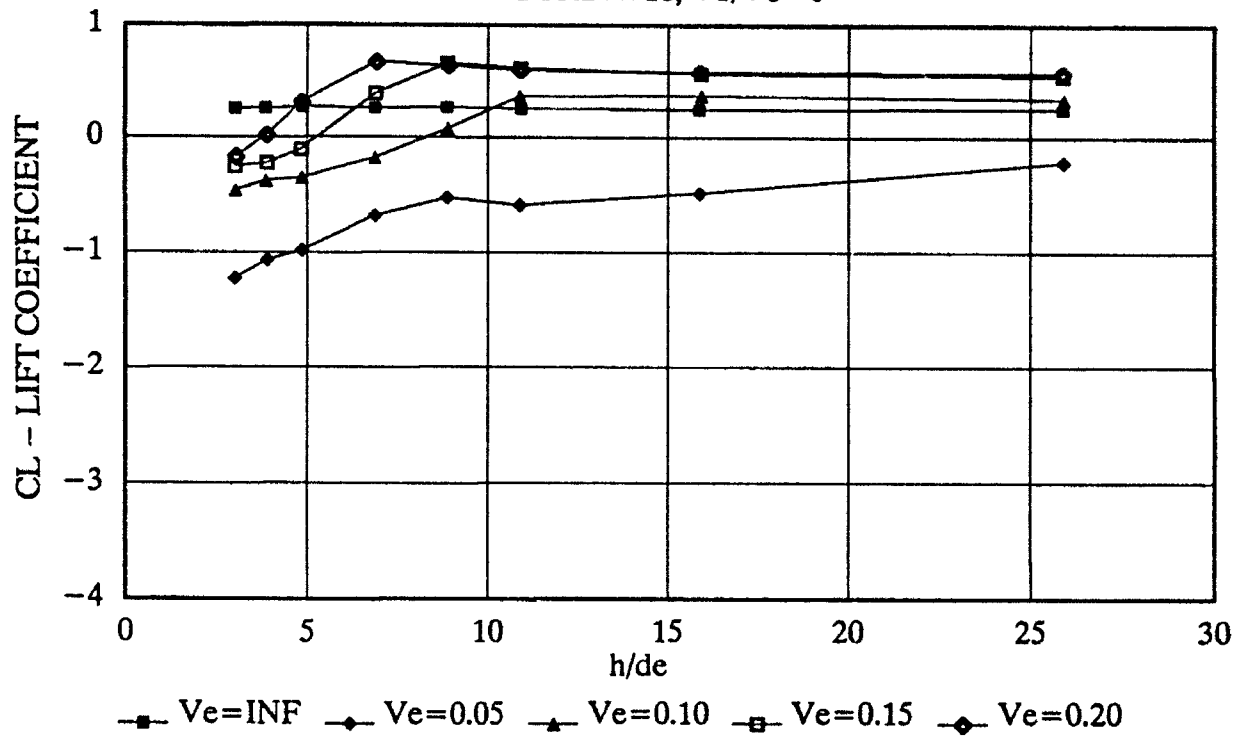


Figure 47. Variation of Aerodynamic Characteristics with Height,  
BTR24W14,  $V_b/V_o=1.0$

VARIATION OF LIFT COEFFICIENT WITH HEIGHT  
BTR24W18,  $V_b/V_o=0$



VARIATION OF PM COEFFICIENT WITH HEIGHT  
BTR24W18,  $V_b/V_o=0$

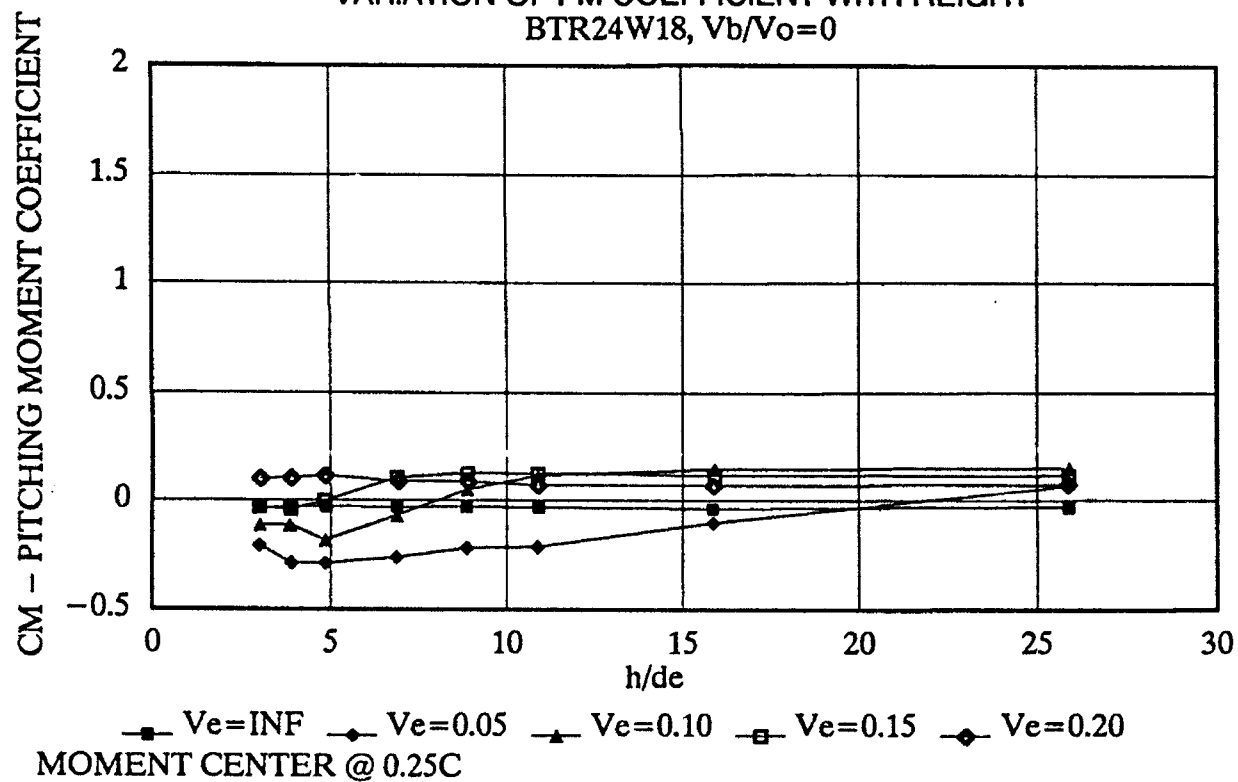


Figure 48. Variation of Aerodynamic Characteristics with Height,  
BTR24W18,  $V_b/V_o=0$

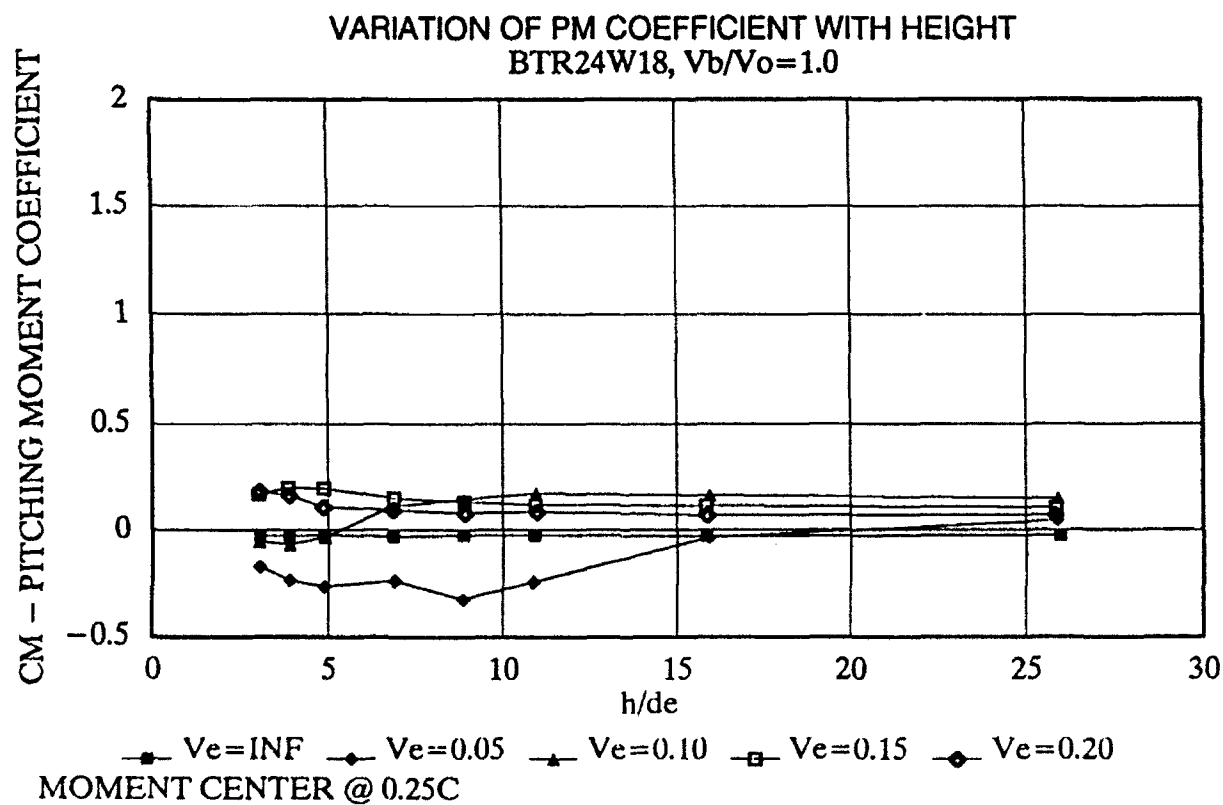
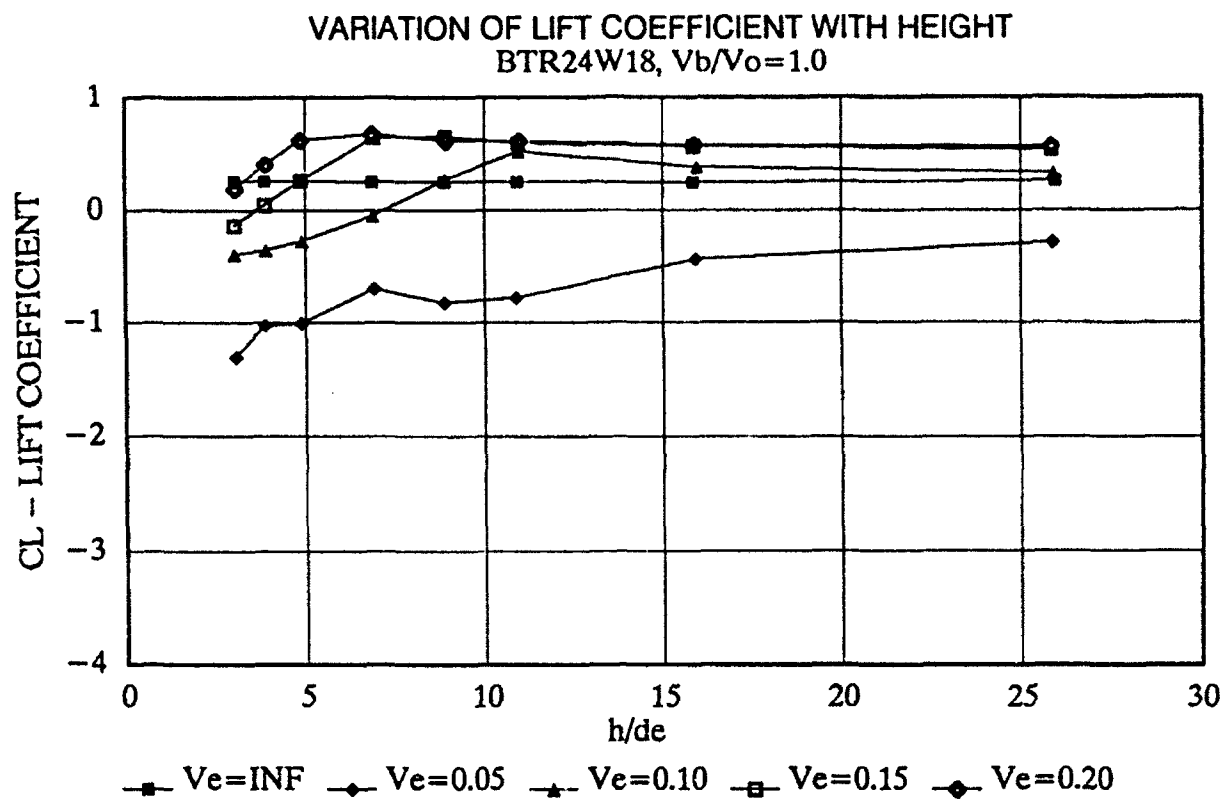


Figure 49. Variation of Aerodynamic Characteristics with Height,  
BTR24W18,  $V_b/V_o=1.0$

TABLE 3. CONFIGURATION KEY

BX24WXXY

BODY  
NOZZLE CONGIG.  
NOZZLE LOCATION

WING CONFIGURATION  
WING L.E. LOCATION  
WING

NOZZLE CONFIGURATION

C - CIRCULAR NOZZLE  
R - RECTANGULAR NOZZLE  
TR - THRUST REVERSER NOZZLE

WING CONFIGURATION

BLANK - STRAIGHT, UNTAPERED, NO FLAP  
S - SWEPT 30 DEGREES, UNTAPERED, NO FLAP  
F - STRAIGHT, UNTRAPERED, FLAP DEFLECTED 30 DEGREES

TEST RANGES

$V_e = 0.05, 0.10, 0.15, 0.20$   
 $h/d_e = 2 \text{ to } 25$   
 $\text{ALPHA} = 0 \text{ to } 11 \text{ deg.}$   
 $V_b/V_o = 0 \text{ and } 1 \text{ fixed}$   
Variable       $0, 0.25, 0.5, 0.75, 1.0$



TABLE 4. RUN SCHEDULE - GROUND VORTEX STUDY

RUN	CONFIGURATION	ALPHA	H/de	Vb	Ve	NPR	Q	COMMENTS
51	BC24	0	R	0	INF	1	11.5	FIRST DATA RUN
52	BC24	0	R	0	0.05	1.65	2.85	
53	BC24	0	R	0	0.1	1.65	11.5	
54	BC24	0	R	0	0.15	1.26	11.5	
55	BC24	0	R	0	0.2	1.14	11.5	
56	BC24	0	R	100	0.2	1.14	11.5	
57	BC24	0	R	100	0.15	1.26	11.5	
58	BC24	R	FA	0	0	1	11.5	
63	BC24W10	R	FA	0	INF	1	11.5	
64	BC24W10	R	FA	0	0.1	1.65	11.5	
65	BC24W10	0	R	0	0.2	1.14	11.5	
66	BC24W10	0	R	0	0.15	1.26	11.5	
67	BC24W10	0	R	0	0.1	1.65	11.5	
68	BC24W10	0	R	0	0.05	1.65	2.85	
69	BC24W10	0	R	0	INF	1	11.5	
70	BC24W10	0	R	50	0.05	1.65	2.85	
71	BC24W10	0	R	100	0.15	1.26	11.5	BAD REPEAT 76
72	BC24W10	0	3	R	0.05	1.65	2.85	
73	BC24W10	0	3	R	0.1	1.65	11.5	
74	BC24W10	0	R	100	INF	1	11.5	
75	BC24W10	0	R	100	0.2	1.14	11.5	
76	BC24W10	0	R	100	0.15	1.26	11.5	
77	BC24W14	0	R	0	INF	1	11.5	
78	BC24W14	0	R	0	0.2	1.14	11.5	
79	BC24W14	0	R	0	0.15	1.26	11.5	
80	BC24W14	0	R	0	0.1	1.65	11.5	
81	BC24W14	0	R	0	0.05	1.65	2.85	
82	BC24W14	R	FA	0	INF	1	11.5	
83	BC24W14	R	FA	0	0.1	1.65	11.5	
84	BC24W14	0	3	R	0.05	1.65	2.85	
85	BC24W14	0	3	R	0.1	1.65	11.5	
86	BC24W14	0	R	100	0.2	1.14	11.5	
87	BC24W14	0	R	100	0.15	1.26	11.5	
88	BC24W14	0	R	100	0.1	1.65	11.5	
89	BC24W14	0	R	100	INF	1	11.5	
90	BC24W14	0	R	50	0.05	1.65	2.85	
91	BC24	0	3	R	0.1	1.65	11.5	
92	BC24	0	R	100	0.1	1.65	11.5	
93	BC24	0	R	100	INF	1	11.5	
94	BC24	0	R	50	0.05	1.65	2.85	
95	BC24W10	0	R	100	0.1	1.65	11.5	REPEAT OF 61
96	BC24W18	0	R	0	INF	1	11.5	
97	BC24W18	0	R	0	0.2	1.14	11.5	
98	BC24W18	0	R	0	0.15	1.26	11.5	
99	BC24W18	0	R	0	0.1	1.65	11.5	
100	BC24W18	0	R	0	0.05	1.65	2.85	
101	BC24W18	R	FA	0	INF	1	11.5	
102	BC24W18	R	FA	0	0.1	1.65	11.5	
103	BC24W18	0	3	R	0.05	1.65	2.85	
105	BC24W18	0	3	R	0.2	1.14	11.5	
106	BC24W18	0	3	R	0.15	1.26	11.5	

RUN	CONFIGURATION	ALPHA	H/de	Vb	Ve	NPR	Q	COMMENTS
107	BC24W18	0	3	R	0.1	1.65	11.5	
108	BC24W18	0	R	100	0.1	1.65	11.5	
109	BC24W18	0	R	100	INF	1	11.5	
110	BC24W18	0	R	100	0.2	1.14	11.5	
111	BC24W18	0	R	100	0.15	1.26	11.5	
112	BC24W18	0	R	50	0.05	1.65	2.85	
113	BR24W18	0	R	0	INF	1	11.5	
114	BR24W18	R	FA	0	INF	1	11.5	
115	BR24W18	0	R	0	0.2	1.14	11.5	
116	BR24W18	0	R	0	0.15	1.26	11.5	
117	BR24W18	0	R	0	0.1	1.65	11.5	
118	BR24W18	R	FA	0	0.1	1.65	11.5	
119	BR24W18	0	R	0	0.05	1.65	2.85	
120	BR24W18	0	3	R	0.15	1.26	11.5	
121	BR24W18	0	3	R	0.1	1.65	11.5	
122	BR24W18	0	3	R	0.05	1.65	2.85	
123	BR24W18	0	R	50	0.05	1.65	2.85	
124	BR24W18	0	R	100	INF	1	11.5	
125	BR24W18	0	R	100	0.2	1.14	11.5	
126	BR24W18	0	R	100	0.15	1.26	11.5	
127	BR24W18	0	R	100	0.1	1.65	11.5	
128	BR24W14	0	R	0	INF	1	11.5	
129	BR24W14	R	FA	0	INF	1	11.5	
130	BR24W14	0	R	0	0.2	1.14	11.5	
131	BR24W14	0	R	0	0.15	1.26	11.5	
132	BR24W14	0	R	0	0.1	1.65	11.5	
133	BR24W14	R	FA	0	0.1	1.65	11.5	
134	BR24W14	0	R	0	0.05	1.65	2.85	
135	BR24W14	0	3	R	0.15	1.26	11.5	
136	BR24W14	0	3	R	0.1	1.65	11.5	
137	BR24W14	0	3	R	0.05	1.65	2.85	
138	BR24W14	0	R	50	0.05	1.65	2.85	
139	BR24W14	0	R	100	0.1	1.65	11.5	
140	BR24W14	0	R	100	0.15	1.26	11.5	
141	BR24W14	0	R	100	0.2	1.14	11.5	
142	BR24W14	0	R	100	INF	1	11.5	
143	BR24W10	0	R	0	INF	1	11.5	
144	BR24W10	R	FA	0	INF	1	11.5	
145	BR24W10	0	R	0	0.2	1.14	11.5	
146	BR24W10	0	R	0	0.15	1.26	11.5	
147	BR24W10	0	R	0	0.1	1.65	11.5	
148	BR24W10	R	FA	0	0.1	1.65	11.5	
149	BR24W10	0	R	0	0.05	1.65	2.85	
150	BR24W10	0	3	R	0.15	1.26	11.5	
151	BR24W10	0	3	R	0.1	1.65	11.5	
152	BR24W10	0	3	R	0.05	1.65	2.85	
153	BR24W10	0	R	50	0.05	1.65	2.85	
154	BR24W10	0	R	100	0.1	1.65	11.5	
155	BR24W10	0	R	100	0.15	1.26	11.5	
156	BR24W10	0	R	100	0.2	1.14	11.5	
157	BR24W10	0	R	100	INF	1	11.5	
158	BTR24W10	0	R	0	INF	1	11.5	
159	BTR24W10	R	FA	0	INF	1	11.5	

RUN	CONFIGURATION	ALPHA	H/de	Vb	Ve	NPR	Q	COMMENTS
160	BTR24W10	0	R	0	0.2	1.14	11.5	
161	BTR24W10	0	R	0	0.15	1.26	11.5	
162	BTR24W10	0	R	0	0.1	1.65	11.5	
163	BTR24W10	R	FA	0	0.1	1.65	11.5	
164	BTR24W10	0	R	0	0.05	1.65	2.85	
165	BTR24W10	0	3	R	0.15	1.26	11.5	
166	BTR24W10	0	3	R	0.1	1.65	11.5	
167	BTR24W10	0	3	R	0.05	1.65	2.85	
168	BTR24W10	0	R	50	0.05	1.65	2.85	
169	BTR24W10	0	R	100	0.1	1.65	11.5	
170	BTR24W10	0	R	100	0.2	1.14	11.5	
171	BTR24W10	0	R	100	0.15	1.26	11.5	
172	BTR24W10	0	R	100	INF	1	11.5	
173	BTR24W14	0	R	0	INF	1	11.5	
174	BTR24W14	R	FA	0	INF	1	11.5	
175	BTR24W14	0	R	0	0.2	1.14	11.5	
176	BTR24W14	0	R	0	0.15	1.26	11.5	
177	BTR24W14	0	R	0	0.1	1.65	11.5	
178	BTR24W14	R	FA	0	0.1	1.65	11.5	
179	BTR24W14	0	R	0	0.05	1.65	2.85	
180	BTR24W14	0	3	R	0.15	1.26	11.5	
181	BTR24W14	0	3	R	0.1	1.65	11.5	
182	BTR24W14	0	3	R	0.05	1.65	2.85	
183	BTR24W14	0	R	50	0.05	1.65	2.85	
184	BTR24W14	0	R	100	0.1	1.65	11.5	
185	BTR24W14	0	R	100	0.2	1.14	11.5	
186	BTR24W14	0	R	100	0.15	1.26	11.5	
187	BTR24W14	0	R	100	INF	1	11.5	
188	BTR24W18	0	R	0	INF	1	11.5	
189	BTR24W18	R	FA	0	INF	1	11.5	
190	BTR24W18	0	R	0	0.2	1.14	11.5	
191	BTR24W18	0	R	0	0.15	1.26	11.5	
192	BTR24W18	0	R	0	0.1	1.65	11.5	
193	BTR24W18	R	FA	0	0.1	1.65	11.5	
194	BTR24W18	0	R	0	0.05	1.65	2.85	
195	BTR24W18	0	3	R	0.15	1.26	11.5	
196	BTR24W18	0	3	R	0.1	1.65	11.5	
197	BTR24W18	0	3	R	0.05	1.65	2.85	
198	BTR24W18	0	R	50	0.05	1.65	2.85	
199	BTR24W18	0	R	100	0.1	1.65	11.5	
200	BTR24W18	0	R	100	0.2	1.14	11.5	
201	BTR24W18	0	R	100	0.15	1.26	11.5	
202	BTR24W18	0	R	100	INF	1	11.5	
203	BTR24	0	R	0	INF	1	11.5	
204	BTR24	0	R	0	0.2	1.14	11.5	
205	BTR24	0	R	0	0.15	1.26	11.5	
206	BTR24	0	R	0	0.1	1.65	11.5	
207	BTR24	0	R	50	0.05	1.65	2.85	
208	BTR24	0	R	100	0.1	1.65	11.5	
209	BTR24	0	R	100	0.15	1.26	11.5	
210	BTR24	0	R	100	0.2	1.14	11.5	
211	BTR24	0	R	100	INF	1	11.5	
212	BTR24W14S (30	R	FA	0	INF	1	11.5	

RUN	CONFIGURATION	ALPHA	H/de	Vb	Ve	NPR	Q	COMMENTS
213	BTR24W14S (30	0	R	0	INF	1	11.5	
214	BTR24W14S (30	R	FA	0	0.1	1.65	11.5	
215	BTR24W14S (30	0	R	0	0.1	1.65	11.5	
216	BTR24W14S (30	0	R	0	0.05	1.65	2.85	
217	BTR24W14S (30	0	R	100	0.05	1.65	2.85	
218	BTR24W14S (30	0	R	100	0.1	1.65	11.5	
219	BTR24W14S (30	0	R	100	INF	1	11.5	
220	BR24W14S (30 )	R	FA	0	INF	1	11.5	
222	BR24W14S (30 )	R	FA	0	0.1	1.65	11.5	
223	BR24W14S (30 )	0	R	0	0.1	1.65	11.5	
224	BR24W14S (30 )	0	R	0	0.05	1.65	2.85	
225	BR24W14S (30 )	0	R	0	INF	1	11.5	
226	BR24W14S (30 )	0	R	100	INF	1	11.5	
227	BR24W14S (30 )	0	R	50	0.05	1.65	2.85	
228	BR24W14S (30 )	0	R	100	0.1	1.65	11.5	
229	BR24W10S (30 )	R	FA	0	INF	1	11.5	
230	BR24W10S (30 )	R	FA	0	0.1	1.65	11.5	
231	BR24W10S (30 )	0	R	0	0.1	1.65	11.5	
232	BR24W10S (30 )	0	R	0	0.05	1.65	2.85	
233	BR24W10S (30 )	0	R	0	INF	1	11.5	
234	BR24W10S (30 )	0	R	100	INF	1	11.5	
235	BR24W10S (30 )	0	R	50	0.05	1.65	2.85	
236	BR24W10S (30 )	0	R	100	0.1	1.65	11.5	
237	BR24W18S (30 )	R	FA	0	INF	1	11.5	
238	BR24W18S (30 )	R	FA	0	0.1	1.65	11.5	
239	BR24W18S (30 )	0	R	0	0.1	1.65	11.5	
240	BR24W18S (30 )	0	R	0	INF	1	11.5	
241	BR24W18S (30 )	0	R	0	0.05	1.65	2.85	
242	BR24W18S (30 )	0	R	50	0.05	1.65	2.85	
243	BR24W18S (30 )	0	R	100	0.1	1.65	11.5	
244	BR24W18S (30 )	0	R	100	INF	1.65	11.5	
245	BR24	R	FA	0	INF	1	11.5	
246	BR24	R	FA	0	0.1	1.65	11.5	
247	BR24	0	R	0	0.1	1.65	11.5	
248	BR24	0	R	0	0.05	1.65	2.85	
249	BR24	0	R	0	INF	1	11.5	
250	BR24	0	R	100	INF	1	11.5	
251	BR24	0	R	100	0.1	1.65	11.5	
252	BR24	0	R	50	0.05	1.65	2.85	
253	BR24W10	0	R	0	0.1	1.65	11.5	REPEAT OF 147
255	BR24W10F (30 )	R	FA	0	INF	1	11.5	
256	BR24W10F (30 )	R	FA	0	0.1	1.65	11.5	
257	BR24W10F (30 )	0	R	0	0.1	1.65	11.5	
258	BR24W10F (30 )	0	R	0	0.05	1.65	2.85	
259	BR24W10F (30 )	0	R	0	INF	1	11.5	
260	BR24W10F (30 )	0	R	100	INF	1	11.5	
261	BR24W10F (30 )	0	R	100	0.1	1.65	11.5	
262	BR24W10F (30 )	0	R	50	0.05	1.65	2.85	
263	BR24W14F (30 )	R	FA	0	INF	1	11.5	
264	BR24W14F (30 )	R	FA	0	0.1	1.65	11.5	
265	BR24W14F (30 )	0	R	0	0.1	1.65	11.5	
266	BR24W14F (30 )	0	R	0	0.05	1.65	2.85	
267	BR24W14F (30 )	0	R	0	INF	1	11.5	

RUN	CONFIGURATION	ALPHA	H/de	Vb	Ve	NPR	Q	COMMENTS
268	BR24W14F (30 )	0	R	100	INF	1	11.5	
269	BR24W14F (30 )	0	R	100	0.1	1.65	11.5	
270	BR24W14F (30 )	0	R	50	0.05	1.65	2.85	
271	BC24W14S (30 )	R	FA	0	INF	1	11.5	
272	BC24W14S (30 )	R	FA	0	0.1	1.65	11.5	
273	BC24W14S (30 )	0	R	0	0.1	1.65	11.5	
274	BC24W14S (30 )	0	R	0	0.05	1.65	2.85	
275	BC24W14S (30 )	0	R	0	INF	1	11.5	
277	BC24W14S (30 )	0	R	100	INF	1	11.5	
278	BC24W14S (30 )	0	R	100	0.1	1.65	11.5	
279	BC24W14S (30 )	0	R	50	0.05	1.65	2.85	
280	BC24W10S (30 )	R	FA	0	INF	1	11.5	
281	BC24W10S (30 )	R	FA	0	0.1	1.65	11.5	
282	BC24W10S (30 )	0	R	0	0.1	1.65	11.5	
283	BC24W10S (30 )	0	R	0	0.05	1.65	2.85	
284	BC24W10S (30 )	0	R	0	INF	1	11.5	
285	BC24W10S (30 )	0	R	100	INF	1	11.5	
286	BC24W10S (30 )	0	R	100	0.1	1.65	11.5	
287	BC24W10S (30 )	0	R	50	0.05	1.65	2.85	
288	BC24W10	0	R	0	0.05	1.65	2.85	REPEAT OF 68
289	BC24W14	0	R	0	0.05	1.65	2.85	REPEAT OF 81
290	BC24W14	0	R	0	0.05	1.65	2.85	FLOW VIS.
291	BC24W14	0	R	0	0.1	1.65	11.5	VIDEO TAPE
292	BC24W14	0	R	0	0.15	1.26	11.5	TOP AND
293	BC24W14	0	R	0	0.2	1.14	11.5	SIDE
294	BC24W14	0	R	100	0.2	1.14	11.5	NOT
295	BC24W14	0	R	100	0.15	1.26	11.5	PRESENTED
296	BC24W14	0	R	100	0.1	1.65	11.5	
297	BC24W14	0	R	50	0.05	1.65	2.85	
299	C12	0	R	0	0.05	1.65	2.85	ISOLATED
300	C12	0	R	0	0.1	1.65	11.5	NOZZLE
301	C12	0	R	0	0.15	1.26	11.5	FLOW VIS.
302	C12	0	R	0	0.2	1.14	11.5	VIDEO TAPE
303	R12	0	R	0	0.2	1.14	11.5	TOP AND
304	R12	0	R	0	0.15	1.26	11.5	SIDE
305	R12	0	R	0	0.1	1.65	11.5	NOT
306	R12	0	R	0	0.05	1.65	2.85	PRESENTED
307	TR12	0	R	0	0.2	1.14	11.5	
308	TR12	0	R	0	0.15	1.26	11.5	
309	TR12	0	R	0	0.1	1.65	11.5	
310	TR12	0	R	0	0.05	1.65	2.85	
312	C12	0	3	R	0.05	1.65	2.85	
313	C12	0	R	50	0.05	1.65	2.85	
314	C12	0	R	100	0.1	1.65	11.5	
315	C12	0	3	R	0.1	1.65	11.5	
316	C12	0	R	100	0.15	1.26	11.5	
317	C12	0	R	100	0.2	1.14	11.5	
318	R12	0	3	R	0.05	1.65	2.85	
319	R12	0	R	50	0.05	1.65	2.85	
320	R12	0	R	100	0.1	1.65	11.5	
321	R12	0	R	100	0.2	1.14	11.5	
322	R12	0	R	100	0.15	1.26	11.5	
323	R12	0	3	R	0.1	1.65	11.5	

RUN	CONFIGURATION	ALPHA	H/de	Vb	Ve	NPR	Q	COMMENTS
324	TR12	0	3	R	0.05	1.65	2.85	
325	TR12	0	R	50	0.05	1.65	2.85	
326	TR12	0	R	100	0.1	1.65	11.5	
327	TR12	0	R	100	0.2	1.14	11.5	
328	TR12	0	R	100	0.15	1.26	11.5	
329	TR12	0	3	R	0.1	1.65	11.5	
330	TR12	0	R	0	0.2	1.14	11.5	
331	TR12	0	R	0	0.15	1.26	11.5	
332	TR12	0	R	0	0.1	1.65	11.5	
333	TR12	0	R	0	0.05	1.65	2.85	
334	R12	0	R	0	0.2	1.14	11.5	
335	R12	0	R	0	0.15	1.26	11.5	
336	R12	0	R	0	0.1	1.65	11.5	
337	R12	0	R	0	0.05	1.65	2.85	
338	C12	0	R	0	0.2	1.14	11.5	
339	C12	0	R	0	0.15	1.26	11.5	
340	C12	0	R	0	0.1	1.65	11.5	
341	C12	0	R	0	0.05	1.65	2.85	

TABLE 5. TABULATED DATA - GROUND VORTEX

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
51	BC24	2	0	0.00	2.807	0.641	0.030	-0.00	0.0373	-0.041
51	BC24	3	0	0.00	3.952	0.695	0.025	0.010	0.0352	-0.043
51	BC24	4	0	0.00	4.816	0.648	0.029	0.005	0.0375	-0.047
51	BC24	5	0	0.00	8.841	0.651	0.029	0.010	0.0338	-0.049
51	BC24	6	0	0.00	10.80	0.673	0.027	0.015	0.0322	-0.048
51	BC24	7	0	0.00	15.81	0.743	0.022	0.020	0.0301	-0.047
51	BC24	8	0	0.00	26.01	0.704	0.024	0.015	0.0331	-0.045
52	BC24	1	0	0.04	2.857	0.050	4.914	-2.04	0.0751	1.4324
52	BC24	2	0	0.05	3.951	0.050	4.922	-0.86	0.1056	0.3738
52	BC24	3	0	0.05	4.889	0.050	4.914	-0.52	0.1273	0.2700
52	BC24	4	0	0.05	8.903	0.050	4.913	-0.29	0.0575	0.1009
52	BC24	5	0	0.05	10.87	0.049	5.126	-0.26	0.0798	0.0849
52	BC24	6	0	-0.0	15.89	0.050	4.925	-0.12	0.0456	0.0376
52	BC24	7	0	0.00	25.97	0.049	5.145	-0.12	0.0520	0.0188
53	BC24	1	0	-0.0	2.865	0.103	1.164	-0.81	0.1013	0.9600
53	BC24	2	0	-0.0	3.873	0.103	1.160	-0.19	0.1188	0.3078
53	BC24	3	0	-0.0	4.912	0.103	1.164	-0.14	0.0828	0.2214
53	BC24	4	0	-0.0	8.908	0.103	1.163	-0.04	0.0638	0.0957
53	BC24	5	0	0.00	10.96	0.102	1.171	-0.02	0.0525	0.0597
53	BC24	6	0	-0.0	15.81	0.103	1.164	-0.03	0.0463	0.0396
53	BC24	7	0	-0.0	26.52	0.102	1.186	-0.03	0.0438	0.0367
54	BC24	1	0	-0.0	2.853	0.149	0.552	-0.10	0.0922	0.2562
54	BC24	2	0	-0.0	3.863	0.149	0.551	-0.07	0.0654	0.1640
54	BC24	3	0	-0.0	4.880	0.149	0.553	-0.05	0.0599	0.1439
54	BC24	4	0	-0.0	8.860	0.149	0.551	-0.02	0.0492	0.0531
54	BC24	5	0	-0.0	10.85	0.149	0.557	-0.03	0.0514	0.0494
54	BC24	6	0	-0.0	15.87	0.149	0.553	-0.03	0.0476	0.0464
54	BC24	7	0	-0.0	25.78	0.149	0.555	-0.04	0.0480	0.0471
55	BC24	1	0	-0.0	2.857	0.209	0.281	-0.05	0.0657	0.1275
55	BC24	2	0	-0.0	3.849	0.209	0.282	-0.04	0.0553	0.1018
55	BC24	3	0	-0.0	4.867	0.214	0.270	-0.03	0.0574	0.0619
55	BC24	4	0	-0.0	8.841	0.214	0.269	-0.03	0.0511	0.0483
55	BC24	5	0	-0.0	10.84	0.215	0.266	-0.03	0.0498	0.0487
55	BC24	6	0	-0.0	15.90	0.216	0.264	-0.03	0.0467	0.0494
55	BC24	7	0	-0.0	25.78	0.214	0.270	-0.03	0.0505	0.0518
56	BC24	2	100	0.02	2.865	0.201	0.306	-0.05	0.0637	0.1137
56	BC24	3	100	0.02	3.837	0.208	0.284	-0.02	0.0577	0.0794
56	BC24	4	100	0.02	4.873	0.211	0.278	-0.00	0.0589	0.0463
56	BC24	5	100	0.02	8.881	0.208	0.284	-0.02	0.0603	0.0515
56	BC24	6	100	0.02	10.82	0.206	0.290	-0.03	0.0579	0.0527
56	BC24	7	100	0.02	15.83	0.207	0.288	-0.03	0.0570	0.0513
56	BC24	8	100	0.02	25.88	0.207	0.288	-0.03	0.0568	0.0530
57	BC24	1	100	0.03	2.817	0.148	0.562	-0.11	0.0791	0.1935
57	BC24	2	100	0.03	3.848	0.149	0.556	-0.06	0.0597	0.1499
57	BC24	3	100	0.03	4.845	0.148	0.565	-0.04	0.0678	0.1117
57	BC24	4	100	0.03	8.845	0.148	0.564	-0.02	0.0556	0.0499
57	BC24	5	100	0.04	10.81	0.149	0.557	-0.01	0.0490	0.0525
57	BC24	6	100	0.03	15.84	0.148	0.563	-0.02	0.0520	0.0515
57	BC24	7	100	0.03	26.20	0.148	0.561	-0.02	0.0506	0.0557

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
58	BC24	1	0	0.00	34.17	1.849	0.003	0.020	0.0339	-0.026
58	BC24	2	0	2.04	40.93	1.683	0.004	0.038	0.0345	-0.007
58	BC24	3	0	4.03	47.62	1.415	0.006	0.044	0.0388	0.0085
58	BC24	4	0	6.07	54.46	4.795	0.000	0.068	0.0389	0.0234
58	BC24	5	0	7.99	60.93	1.395	0.006	0.075	0.0455	0.0336
58	BC24	6	0	10.0	67.80	1.296	0.007	0.088	0.0530	0.0518
58	BC24	7	0	11.6	73.39	18539	0.000	0.116	0.0553	0.0632
59	BC24	9	0	-2.0	27.40	0	*****	-0.07	0.0015	-0.324
59	BC24	10	0	6.00	54.22	0	*****	0.015	-0.014	0.2373
59	BC24	10	0	-2.0	30.81	0	*****	0.017	-0.005	0.0326
59	BC24	11	0	5.02	52.15	0	*****	0.144	-0.054	0.3210
59	BC24	11	0	11.6	73.34	0	*****	-0.10	0.0056	0.2858
59	BC24	12	0	11.6	72.67	0	*****	0.194	0.0161	0.6487
60	BC24W10	3	0	0.01	3.920	0.100	1.235	0.569	0.0325	0.5398
60	BC24W10	4	25	0.01	3.916	0.100	1.216	0.567	0.0389	0.5322
60	BC24W10	5	50	0.00	3.910	0.099	1.245	0.564	0.0456	0.5357
60	BC24W10	6	75	0.01	3.917	0.100	1.221	0.555	0.0425	0.5112
60	BC24W10	7	100	0.01	3.916	0.099	1.250	0.548	0.0450	0.5139
63	BC24W10	3	0	-0.0	36.82	9.878	0.000	0.222	0.0544	0.0519
63	BC24W10	4	0	2.00	38.31	532.9	0.000	0.348	0.0542	0.1405
63	BC24W10	5	0	3.99	38.19	2.894	0.001	0.468	0.0614	0.2327
63	BC24W10	6	0	6.02	38.86	2.880	0.001	0.613	0.0753	0.3224
63	BC24W10	7	0	8.04	38.39	4.370	0.000	0.721	0.0900	0.4049
63	BC24W10	8	0	10.0	38.35	2.525	0.001	0.830	0.1256	0.4734
63	BC24W10	9	0	11.7	38.42	17.20	0.000	0.899	0.1759	0.4818
64	BC24W10	1	0	0.04	36.86	0.100	1.224	0.205	0.0755	0.1449
64	BC24W10	2	0	2.00	38.35	0.101	1.211	0.325	0.0751	0.2337
64	BC24W10	3	0	4.05	38.66	0.101	1.213	0.462	0.0762	0.3281
64	BC24W10	4	0	6.07	39.25	0.101	1.213	0.589	0.0863	0.4177
64	BC24W10	5	0	8.02	39.05	0.101	1.201	0.712	0.1017	0.5000
64	BC24W10	6	0	10.0	38.56	0.101	1.211	0.833	0.1317	0.5747
64	BC24W10	7	0	11.7	38.44	0.101	1.215	0.877	0.1826	0.5929
65	BC24W10	2	0	-0.0	15.86	0.205	0.293	0.213	0.0788	0.1488
65	BC24W10	3	0	-0.0	10.86	0.207	0.288	0.213	0.0761	0.1515
65	BC24W10	4	0	0.00	8.872	0.206	0.290	0.236	0.0706	0.1560
65	BC24W10	5	0	0.00	6.861	0.206	0.290	0.232	0.0762	0.1612
65	BC24W10	6	0	0.00	4.864	0.207	0.287	0.274	0.0732	0.1813
65	BC24W10	7	0	0.00	3.869	0.205	0.292	0.328	0.0728	0.2353
65	BC24W10	8	0	0.01	3.042	0.203	0.299	0.370	0.0611	0.2900
66	BC24W10	1	0	0.02	3.044	0.152	0.535	0.413	0.0622	0.3898
66	BC24W10	2	0	0.03	3.890	0.154	0.522	0.449	0.0601	0.3671
66	BC24W10	3	0	0.02	4.885	0.152	0.529	0.402	0.0676	0.3101
66	BC24W10	4	0	0.01	6.877	0.152	0.535	0.266	0.0781	0.1893
66	BC24W10	5	0	0.01	8.882	0.153	0.527	0.244	0.0704	0.1623
66	BC24W10	6	0	0.00	10.86	0.152	0.531	0.232	0.0763	0.1566
66	BC24W10	7	0	0.00	15.92	0.151	0.539	0.205	0.0794	0.1489
66	BC24W10	8	0	0.00	25.86	0.151	0.540	0.202	0.0803	0.1512



RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
67	BC24W10	1	0	0.03	25.90	0.101	1.214	0.216	0.0736	0.1479
67	BC24W10	2	0	0.03	15.89	0.101	1.204	0.220	0.0788	0.1567
67	BC24W10	3	0	0.03	10.90	0.101	1.195	0.258	0.0814	0.1906
67	BC24W10	4	0	0.04	8.917	0.101	1.215	0.342	0.0774	0.2620
67	BC24W10	5	0	0.06	6.908	0.100	1.216	0.463	0.0721	0.3909
67	BC24W10	6	0	0.06	4.918	0.101	1.207	0.547	0.0587	0.5085
67	BC24W10	8	0	0.07	3.935	0.100	1.220	0.559	0.0469	0.5430
67	BC24W10	9	0	0.06	3.078	0.100	1.222	0.481	0.0703	0.5719
68	BC24W10	1	0	0.02	3.058	0.050	4.884	-0.55	0.0831	0.5774
68	BC24W10	2	0	0.02	3.897	0.050	4.890	-0.29	0.1500	0.4919
68	BC24W10	3	0	0.02	4.892	0.050	4.894	0.062	0.1227	0.5853
68	BC24W10	4	0	0.02	6.894	0.049	5.099	0.023	0.1086	0.3925
68	BC24W10	5	0	0.02	8.905	0.050	4.900	0.090	0.1272	0.3334
68	BC24W10	6	0	0.02	10.88	0.050	4.897	0.162	0.1270	0.3065
68	BC24W10	7	0	0.02	15.90	0.050	4.891	0.177	0.1220	0.2271
68	BC24W10	8	0	0.02	25.90	0.050	4.910	0.133	0.1147	0.1383
69	BC24W10	1	0	-0.0	25.86	20.01	0.000	0.229	0.0525	0.0603
69	BC24W10	2	0	-0.0	15.91	17.92	0.000	0.227	0.0511	0.0578
69	BC24W10	3	0	-0.0	10.85	3.974	0.000	0.224	0.0576	0.0595
69	BC24W10	4	0	-0.0	8.869	25.21	0.000	0.242	0.0499	0.0624
69	BC24W10	5	0	-0.0	6.881	23.98	0.000	0.231	0.0522	0.0645
69	BC24W10	6	0	-0.0	4.849	1.594	0.004	0.234	0.0572	0.0656
69	BC24W10	7	0	-0.0	3.847	2.011	0.003	0.233	0.0575	0.0668
69	BC24W10	8	0	-0.0	3.028	1.803	0.003	0.228	0.0581	0.0718
70	BC24W10	1	50	0.03	3.067	0.050	4.858	0.409	0.1331	1.0732
70	BC24W10	2	50	0.04	3.912	0.048	5.264	0.726	0.1279	1.0557
70	BC24W10	3	50	0.03	4.900	0.048	5.258	0.629	0.1017	0.8973
70	BC24W10	4	50	0.04	6.915	0.050	4.831	0.493	0.0657	0.6759
70	BC24W10	5	50	0.03	8.894	0.049	5.036	0.390	0.0953	0.5289
70	BC24W10	6	50	0.03	11.02	0.049	5.043	0.348	0.1311	0.4342
70	BC24W10	7	50	0.02	16.04	0.049	5.043	0.211	0.1145	0.2339
70	BC24W10	8	50	0.02	25.94	0.049	5.049	0.130	0.1260	0.1531
72	BC24W10	2	0	0.04	3.915	0.049	5.122	-0.45	0.0905	0.3054
72	BC24W10	3	25	0.06	3.927	0.050	4.915	0.475	0.0647	0.8779
72	BC24W10	4	50	0.06	3.923	0.049	5.138	0.725	0.0715	1.0022
72	BC24W10	5	75	0.06	3.933	0.050	4.932	0.789	0.0364	1.0322
73	BC24W10	1	0	0.09	3.945	0.100	1.235	0.560	0.0353	0.5394
73	BC24W10	2	25	0.09	3.941	0.100	1.229	0.572	0.0386	0.5458
73	BC24W10	3	50	0.09	3.944	0.100	1.228	0.571	0.0390	0.5381
73	BC24W10	4	75	0.10	3.957	0.100	1.225	0.569	0.0329	0.5212
73	BC24W10	5	100	0.09	3.951	0.101	1.204	0.520	0.0419	0.4963
74	BC24W10	1	100	0.00	2.878	0.722	0.023	0.225	0.0464	0.0537
74	BC24W10	2	100	0.00	3.847	0.841	0.017	0.237	0.0403	0.0525
74	BC24W10	3	100	0.00	6.367	0.785	0.020	0.219	0.0454	0.0441
74	BC24W10	4	100	0.00	8.845	0.740	0.022	0.207	0.0451	0.0385
74	BC24W10	5	100	0.00	10.79	0.977	0.012	0.220	0.0403	0.0403
74	BC24W10	6	100	0.00	15.98	0.854	0.016	0.211	0.0432	0.0380
74	BC24W10	7	100	-0.0	25.82	0.739	0.022	0.210	0.0449	0.0371

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
75	BC24W10	1	100	0.03	2.895	0.196	0.320	0.314	0.0566	0.2509
75	BC24W10	2	100	0.02	3.883	0.198	0.314	0.265	0.0633	0.1668
75	BC24W10	3	100	0.02	4.898	0.198	0.313	0.243	0.0614	0.1436
75	BC24W10	4	100	0.02	8.868	0.198	0.315	0.218	0.0598	0.1387
75	BC24W10	5	100	0.01	10.77	0.195	0.324	0.206	0.0682	0.1363
75	BC24W10	6	100	0.01	15.83	0.197	0.319	0.209	0.0666	0.1350
75	BC24W10	7	100	0.01	25.77	0.199	0.312	0.208	0.0629	0.1351
76	BC24W10	1	100	0.04	2.929	0.150	0.545	0.354	0.0572	0.3375
76	BC24W10	2	100	0.04	3.862	0.150	0.550	0.369	0.0643	0.3005
76	BC24W10	3	100	0.03	4.856	0.151	0.539	0.303	0.0669	0.2197
76	BC24W10	4	100	0.03	8.898	0.151	0.540	0.226	0.0628	0.1430
76	BC24W10	5	100	0.03	10.99	0.152	0.535	0.225	0.0611	0.1407
76	BC24W10	6	100	0.02	15.85	0.151	0.542	0.212	0.0611	0.1367
76	BC24W10	7	100	0.02	25.81	0.150	0.550	0.205	0.0691	0.1417
77	BC24W14	2	0	0.00	2.901	1.254	0.007	0.243	0.0416	-0.055
77	BC24W14	3	0	0.00	3.840	1.020	0.011	0.239	0.0429	-0.056
77	BC24W14	4	0	0.00	4.860	0.880	0.016	0.230	0.0458	-0.060
77	BC24W14	5	0	0.00	8.848	1.019	0.011	0.234	0.0444	-0.058
77	BC24W14	6	0	0.00	10.85	0.781	0.020	0.218	0.0509	-0.058
77	BC24W14	7	0	0.00	15.79	0.906	0.015	0.219	0.0455	-0.062
77	BC24W14	8	0	0.00	25.79	1.117	0.009	0.235	0.0419	-0.058
78	BC24W14	1	0	0.03	2.914	0.193	0.330	0.451	0.0511	0.0774
78	BC24W14	2	0	0.03	3.883	0.194	0.326	0.420	0.0576	0.0536
78	BC24W14	3	0	0.02	4.893	0.196	0.321	0.345	0.0684	0.0311
78	BC24W14	4	0	0.01	8.873	0.196	0.321	0.251	0.0702	0.0178
78	BC24W14	5	0	0.01	10.83	0.195	0.324	0.252	0.0685	0.0182
78	BC24W14	6	0	0.01	15.91	0.196	0.321	0.238	0.0708	0.0183
78	BC24W14	7	0	0.01	25.79	0.198	0.314	0.247	0.0646	0.0196
79	BC24W14	1	0	0.04	2.888	0.150	0.550	0.485	0.0438	0.1200
79	BC24W14	2	0	0.04	3.921	0.151	0.538	0.448	0.0492	0.1183
79	BC24W14	3	0	0.04	4.876	0.151	0.543	0.436	0.0565	0.0860
79	BC24W14	4	0	0.03	6.889	0.150	0.550	0.305	0.0704	0.0299
79	BC24W14	5	0	0.02	8.883	0.149	0.555	0.263	0.0697	0.0197
79	BC24W14	6	0	0.02	10.86	0.150	0.549	0.245	0.0715	0.0173
79	BC24W14	7	0	0.02	15.87	0.150	0.550	0.227	0.0710	0.0170
79	BC24W14	8	0	0.02	25.87	0.150	0.544	0.234	0.0671	0.0158
80	BC24W14	1	0	0.08	2.925	0.103	1.152	0.546	0.0695	0.2545
80	BC24W14	2	0	0.07	3.922	0.103	1.154	0.445	0.0468	0.1992
80	BC24W14	3	0	0.07	4.916	0.103	1.155	0.380	0.0544	0.1894
80	BC24W14	4	0	0.06	6.900	0.103	1.157	0.382	0.0682	0.1175
80	BC24W14	5	0	0.06	8.896	0.103	1.158	0.332	0.0741	0.0621
80	BC24W14	6	0	0.05	11.02	0.103	1.160	0.258	0.0760	0.0278
80	BC24W14	7	0	0.05	15.86	0.103	1.161	0.226	0.0710	0.0180
80	BC24W14	8	0	0.05	25.86	0.103	1.150	0.210	0.0669	0.0151

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
81	BC24W14	1	0	0.02	2.855	0.049	5.072	-1.94	0.0241	1.0779
81	BC24W14	2	0	0.03	3.892	0.049	5.079	-1.31	0.1641	0.5725
81	BC24W14	3	0	0.03	4.932	0.049	5.090	-0.80	0.1570	0.4503
81	BC24W14	4	0	0.03	6.900	0.049	5.100	-0.67	0.1164	0.1535
81	BC24W14	5	0	0.04	8.890	0.049	5.090	-0.45	0.1092	0.0979
81	BC24W14	6	0	0.04	10.83	0.049	5.079	-0.21	0.0807	0.0912
81	BC24W14	7	0	0.04	15.82	0.049	5.099	0.009	0.0879	0.0441
81	BC24W14	8	0	0.04	25.87	0.049	5.099	0.083	0.0655	0.0147
82	BC24W14	1	0	-0.0	34.17	0.814	0.018	0.204	0.0517	-0.054
82	BC24W14	2	0	2.05	40.43	1.025	0.011	0.346	0.0476	-0.028
82	BC24W14	3	0	3.99	46.35	0.982	0.012	0.468	0.0550	-0.003
82	BC24W14	4	0	6.04	52.64	0.908	0.015	0.580	0.0713	0.0167
82	BC24W14	5	0	8.07	58.91	0.781	0.020	0.693	0.0970	0.0390
82	BC24W14	6	0	10.0	64.88	0.715	0.024	0.789	0.1274	0.0587
82	BC24W14	7	0	11.7	70.17	0.924	0.014	0.866	0.1730	0.0643
83	BC24W14	1	0	0.03	34.19	0.103	1.147	0.205	0.0717	0.0161
83	BC24W14	2	0	2.01	40.19	0.105	1.124	0.312	0.0722	0.0402
83	BC24W14	3	0	4.02	46.35	0.104	1.136	0.441	0.0772	0.0651
83	BC24W14	4	0	5.94	52.25	0.104	1.137	0.564	0.0874	0.0838
83	BC24W14	5	0	8.03	58.69	0.105	1.123	0.680	0.1064	0.1062
83	BC24W14	6	0	9.99	64.74	0.104	1.127	0.789	0.1371	0.1261
83	BC24W14	7	0	11.7	70.12	0.104	1.136	0.877	0.1846	0.1312
84	BC24W14	1	0	0.00	3.872	0.051	4.757	-0.98	0.1906	0.5941
84	BC24W14	2	25	0.01	3.882	0.052	4.554	-0.42	0.1528	0.6197
84	BC24W14	3	50	0.01	3.895	0.052	4.552	-0.02	0.1014	0.5921
85	BC24W14	1	0	0.04	3.907	0.104	1.133	0.437	0.0539	0.1970
85	BC24W14	2	25	0.04	3.912	0.104	1.131	0.486	0.0479	0.2032
85	BC24W14	3	50	0.04	3.917	0.104	1.142	0.520	0.0468	0.1936
85	BC24W14	4	75	0.04	3.910	0.103	1.147	0.528	0.0506	0.1860
85	BC24W14	5	100	0.04	3.914	0.104	1.134	0.547	0.0515	0.1740
86	BC24W14	1	100	-0.0	2.912	0.205	0.292	0.421	0.0614	0.0444
86	BC24W14	2	100	-0.0	3.883	0.208	0.285	0.331	0.0701	0.0197
86	BC24W14	3	100	-0.0	4.885	0.209	0.281	0.275	0.0686	0.0165
86	BC24W14	4	100	-0.0	6.902	0.207	0.287	0.249	0.0734	0.0207
86	BC24W14	5	100	-0.0	8.879	0.209	0.281	0.254	0.0666	0.0201
86	BC24W14	6	100	-0.0	10.85	0.207	0.287	0.240	0.0714	0.0205
86	BC24W14	7	100	-0.0	15.93	0.207	0.287	0.220	0.0741	0.0178
86	BC24W14	8	100	-0.0	25.78	0.211	0.278	0.236	0.0680	0.0241
87	BC24W14	2	100	0.01	2.888	0.149	0.554	0.524	0.0535	0.1053
87	BC24W14	3	100	0.01	3.881	0.150	0.549	0.494	0.0545	0.0853
87	BC24W14	4	100	0.00	4.912	0.149	0.558	0.417	0.0707	0.0516
87	BC24W14	5	100	0.00	6.888	0.150	0.548	0.281	0.0682	0.0168
87	BC24W14	6	100	-0.0	8.878	0.150	0.550	0.248	0.0733	0.0161
87	BC24W14	7	100	-0.0	10.86	0.149	0.551	0.238	0.0711	0.0161
87	BC24W14	8	100	-0.0	15.86	0.149	0.552	0.224	0.0715	0.0168
87	BC24W14	9	100	-0.0	26.01	0.149	0.552	0.221	0.0737	0.0190

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
88	BC24W14	1	100	0.06	2.985	0.103	1.163	0.660	0.0420	0.2001
88	BC24W14	2	100	0.05	3.943	0.103	1.163	0.551	0.0450	0.1845
88	BC24W14	3	100	0.04	4.914	0.102	1.175	0.514	0.0538	0.1547
88	BC24W14	4	100	0.03	6.911	0.103	1.165	0.418	0.0712	0.0833
88	BC24W14	5	100	0.03	8.969	0.103	1.163	0.304	0.0689	0.0344
88	BC24W14	6	100	0.02	10.82	0.103	1.166	0.243	0.0732	0.0212
88	BC24W14	7	100	0.02	15.98	0.103	1.166	0.214	0.0707	0.0155
88	BC24W14	8	100	0.02	25.85	0.102	1.178	0.208	0.0707	0.0149
89	BC24W14	1	100	-0.0	2.880	0.571	0.037	0.251	0.0625	-0.049
89	BC24W14	2	100	-0.0	3.849	0.756	0.021	0.209	0.0516	-0.056
89	BC24W14	3	100	-0.0	4.851	0.715	0.024	0.214	0.0520	-0.052
89	BC24W14	4	100	-0.0	6.885	0.762	0.021	0.213	0.0525	-0.052
89	BC24W14	5	100	-0.0	8.877	0.710	0.024	0.214	0.0531	-0.055
89	BC24W14	6	100	-0.0	10.83	0.683	0.026	0.202	0.0533	-0.057
89	BC24W14	7	100	-0.0	15.84	0.807	0.019	0.214	0.0485	-0.057
89	BC24W14	8	100	-0.0	25.79	0.752	0.021	0.218	0.0503	-0.054
90	BC24W14	1	50	0.01	2.937	0.050	4.850	-0.50	0.1579	0.8617
90	BC24W14	2	50	0.02	3.935	0.050	4.823	-0.13	0.1089	0.6018
90	BC24W14	3	50	0.02	4.904	0.049	5.038	-0.24	0.1046	0.4900
90	BC24W14	4	50	0.01	6.874	0.050	4.845	-0.13	0.1193	0.3268
90	BC24W14	5	50	0.01	8.875	0.051	4.648	0.030	0.1118	0.2162
90	BC24W14	6	50	0.01	10.83	0.050	4.854	0.021	0.1233	0.1466
90	BC24W14	7	50	0.01	15.84	0.050	4.859	0.088	0.1091	0.0520
90	BC24W14	8	50	0.01	26.17	0.049	5.058	0.063	0.0962	0.0200
91	BC24	2	0	0.05	3.881	0.102	1.169	-0.14	0.0850	0.2226
91	BC24	3	25	0.05	3.879	0.102	1.171	-0.13	0.0801	0.2194
91	BC24	4	50	0.05	3.878	0.101	1.197	-0.13	0.0765	0.2152
91	BC24	5	75	0.05	3.883	0.101	1.198	-0.12	0.0752	0.2054
91	BC24	6	100	0.05	3.882	0.102	1.187	-0.11	0.0727	0.2050
92	BC24	1	100	0.05	2.923	0.102	1.185	-0.15	0.0757	0.2374
92	BC24	2	100	0.05	3.880	0.102	1.189	-0.11	0.0733	0.2062
92	BC24	3	100	0.05	4.886	0.102	1.188	-0.07	0.0701	0.1766
92	BC24	4	100	0.05	6.942	0.101	1.201	-0.03	0.0689	0.1018
92	BC24	5	100	0.05	8.878	0.101	1.194	-0.02	0.0610	0.0557
92	BC24	6	100	0.05	10.81	0.101	1.197	-0.03	0.0604	0.0437
92	BC24	7	100	0.05	15.85	0.101	1.208	-0.03	0.0529	0.0393
92	BC24	8	100	0.04	26.32	0.101	1.211	-0.03	0.0535	0.0406
93	BC24	1	100	-0.0	2.880	0.784	0.020	0.014	0.0362	-0.034
93	BC24	2	100	0.00	3.884	0.975	0.013	0.026	0.0281	-0.034
93	BC24	3	100	0.00	4.848	0.860	0.016	0.023	0.0335	-0.034
93	BC24	4	100	-0.0	6.887	0.793	0.019	0.018	0.0326	-0.038
93	BC24	5	100	0.00	8.839	0.855	0.016	0.025	0.0350	-0.033
93	BC24	6	100	0.00	10.93	0.992	0.012	0.027	0.0304	-0.035
93	BC24	7	100	-0.0	16.12	0.817	0.018	0.019	0.0338	-0.034
93	BC24	8	100	-0.0	25.78	0.841	0.017	0.025	0.0328	-0.034

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
94	BC24	1	50	0.05	2.915	0.050	4.895	-0.75	0.1618	0.5771
94	BC24	2	50	0.05	3.918	0.050	4.883	-0.47	0.1398	0.3949
94	BC24	3	50	0.05	4.876	0.050	4.921	-0.42	0.1266	0.2700
94	BC24	4	50	0.05	6.879	0.050	4.922	-0.29	0.0924	0.2153
94	BC24	5	50	0.05	8.894	0.050	4.928	-0.20	0.0904	0.1770
94	BC24	6	50	0.06	10.88	0.049	5.118	-0.10	0.0773	0.1356
94	BC24	7	50	0.05	16.01	0.049	5.145	-0.08	0.0647	0.0480
94	BC24	8	50	0.05	25.95	0.050	4.942	-0.03	0.0615	0.0221
95	BC24W10	9	100	0.11	2.935	0.100	1.222	0.469	0.0400	0.5252
95	BC24W10	10	100	0.06	3.807	0.100	1.238	0.517	0.0457	0.5098
95	BC24W10	11	100	0.06	4.910	0.099	1.250	0.520	0.0508	0.4587
95	BC24W10	12	100	0.05	6.916	0.100	1.224	0.408	0.0564	0.3116
95	BC24W10	13	100	0.03	8.893	0.099	1.244	0.276	0.0664	0.2010
95	BC24W10	14	100	0.03	10.90	0.099	1.243	0.238	0.1161	0.2023
95	BC24W10	15	100	0.03	15.94	0.099	1.246	0.215	0.0603	0.1381
95	BC24W10	16	100	0.03	25.87	0.099	1.244	0.211	0.0571	0.1380
96	BC24W18	17	0	0.03	2.847	0.755	0.021	0.221	0.0493	-0.177
96	BC24W18	18	0	0.03	3.835	0.817	0.018	0.220	0.0517	-0.174
96	BC24W18	19	0	0.03	4.832	0.767	0.021	0.227	0.0503	-0.175
96	BC24W18	20	0	0.03	6.883	0.839	0.017	0.229	0.0490	-0.175
96	BC24W18	21	0	0.02	8.862	0.818	0.018	0.218	0.0510	-0.174
96	BC24W18	22	0	0.03	10.86	0.768	0.020	0.216	0.0491	-0.177
96	BC24W18	23	0	0.02	15.82	0.742	0.022	0.214	0.0516	-0.174
96	BC24W18	24	0	0.02	25.80	0.738	0.022	0.220	0.0502	-0.174
97	BC24W18	1	0	0.04	2.877	0.197	0.316	0.261	0.0585	-0.074
97	BC24W18	2	0	0.04	3.849	0.196	0.319	0.268	0.0669	-0.096
97	BC24W18	3	0	0.04	4.864	0.197	0.316	0.308	0.0701	-0.142
97	BC24W18	4	0	0.04	6.913	0.198	0.314	0.245	0.0747	-0.127
97	BC24W18	5	0	0.04	8.899	0.199	0.311	0.237	0.0725	-0.118
97	BC24W18	6	0	0.04	10.86	0.198	0.314	0.219	0.0755	-0.113
97	BC24W18	7	0	0.04	15.86	0.200	0.307	0.208	0.0758	-0.106
97	BC24W18	8	0	0.03	25.81	0.199	0.311	0.207	0.0758	-0.105
98	BC24W18	1	0	0.06	2.896	0.147	0.567	0.233	0.0674	-0.015
98	BC24W18	2	0	0.06	3.899	0.149	0.554	0.194	0.0617	0.0039
98	BC24W18	3	0	0.05	4.903	0.148	0.561	0.218	0.0674	-0.043
98	BC24W18	4	0	0.05	6.863	0.148	0.563	0.262	0.0765	-0.122
98	BC24W18	5	0	0.05	8.892	0.148	0.562	0.232	0.0698	-0.107
98	BC24W18	6	0	0.05	10.79	0.147	0.571	0.209	0.0708	-0.105
98	BC24W18	7	0	0.05	16.21	0.147	0.568	0.180	0.0714	-0.094
98	BC24W18	8	0	0.04	26.06	0.148	0.561	0.171	0.0729	-0.087
99	BC24W18	1	0	0.08	2.916	0.101	1.207	0.086	0.1280	0.1940
99	BC24W18	2	0	0.08	3.894	0.100	1.235	0.085	0.0875	0.1087
99	BC24W18	3	0	0.08	4.871	0.100	1.234	0.022	0.0856	0.1207
99	BC24W18	4	0	0.08	6.884	0.100	1.234	0.132	0.0820	0.0336
99	BC24W18	5	0	0.08	8.932	0.100	1.222	0.198	0.0768	-0.054
99	BC24W18	6	0	0.08	10.95	0.100	1.225	0.188	0.0787	-0.080
99	BC24W18	7	0	0.08	15.82	0.100	1.225	0.145	0.0717	-0.074
99	BC24W18	8	0	0.07	26.26	0.100	1.227	0.119	0.0730	-0.061

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
100	BC24W18	1	0	0.05	2.856	0.049	4.966	-3.04	0.1285	2.3595
100	BC24W18	2	0	0.06	3.878	0.050	4.786	-1.51	0.2191	1.0830
100	BC24W18	3	0	0.06	4.862	0.050	4.785	-1.27	0.1819	0.8036
100	BC24W18	4	0	0.07	6.926	0.050	4.769	-0.87	0.0763	0.4543
100	BC24W18	5	0	0.07	8.907	0.050	4.774	-0.65	0.0726	0.3133
100	BC24W18	6	0	0.07	10.80	0.050	4.773	-0.43	0.0758	0.2336
100	BC24W18	7	0	0.08	15.83	0.049	4.975	-0.14	0.0635	0.0804
100	BC24W18	8	0	0.07	25.84	0.049	4.985	-0.03	0.0657	-0.001
100	BC24W18	9	0	0.02	16.24	0	*****	0.144	-0.039	-0.469
101	BC24W18	2	0	0.02	36.90	0.777	0.020	0.229	0.0512	-0.176
101	BC24W18	3	0	2.04	38.37	0.672	0.027	0.343	0.0597	-0.241
101	BC24W18	4	0	4.06	38.25	0.663	0.028	0.448	0.0701	-0.299
101	BC24W18	5	0	6.06	38.33	0.737	0.022	0.595	0.0818	-0.375
101	BC24W18	6	0	8.03	38.39	0.677	0.027	0.695	0.1098	-0.437
101	BC24W18	7	0	10.0	38.39	0.627	0.031	0.791	0.1521	-0.503
101	BC24W18	8	0	11.6	38.38	0.632	0.030	0.877	0.2032	-0.547
102	BC24W18	1	0	0.06	36.92	0.099	1.248	0.100	0.0734	-0.061
102	BC24W18	2	0	2.06	38.44	0.099	1.251	0.224	0.0756	-0.130
102	BC24W18	3	0	4.07	38.43	0.099	1.252	0.349	0.0804	-0.201
102	BC24W18	4	0	6.01	38.44	0.099	1.255	0.475	0.0959	-0.268
102	BC24W18	5	0	8.00	38.41	0.099	1.257	0.596	0.1150	-0.337
102	BC24W18	6	0	10.0	38.42	0.099	1.256	0.729	0.1444	-0.403
102	BC24W18	7	0	11.7	38.43	0.100	1.227	0.804	0.1926	-0.464
103	BC24W18	1	0	-0.0	3.862	0.049	4.965	-1.60	0.2247	1.1306
103	BC24W18	2	28.8	-0.0	3.866	0.049	5.003	-1.36	0.1930	1.0066
103	BC24W18	3	44	-0.0	3.866	0.049	5.022	-1.26	0.1817	1.0085
105	BC24W18	3	0	-0.0	3.892	0.196	0.319	0.270	0.0558	-0.100
105	BC24W18	4	23.2	-0.0	3.907	0.197	0.319	0.350	0.0500	-0.125
105	BC24W18	5	51.59	-0.0	3.896	0.195	0.325	0.347	0.0558	-0.148
105	BC24W18	6	69.19	-0.0	3.895	0.197	0.317	0.351	0.0577	-0.151
105	BC24W18	7	96.79	-0.0	3.897	0.195	0.325	0.372	0.0586	-0.168
106	BC24W18	1	0	-0.0	3.896	0.156	0.509	0.195	0.0582	-0.016
106	BC24W18	2	26	-0.0	3.904	0.154	0.519	0.257	0.0517	-0.043
106	BC24W18	3	54	-0.0	3.906	0.155	0.515	0.286	0.0494	-0.067
106	BC24W18	4	73.60	-0.0	3.909	0.153	0.526	0.301	0.0492	-0.083
106	BC24W18	5	96.39	-0.0	3.912	0.154	0.522	0.323	0.0482	-0.099
107	BC24W18	1	0	0.00	3.915	0.101	1.194	0.075	0.0877	0.1063
107	BC24W18	2	25.2	0.00	3.923	0.101	1.204	0.077	0.0717	0.1113
107	BC24W18	3	54.39	0.00	3.926	0.101	1.195	0.125	0.0633	0.0913
107	BC24W18	4	76.39	0.00	3.931	0.101	1.206	0.138	0.0587	0.0847
107	BC24W18	5	95.19	0.01	3.937	0.101	1.192	0.146	0.0549	0.0746
108	BC24W18	1	97.19	0.01	2.937	0.102	1.184	0.216	0.0551	0.0695
108	BC24W18	2	89.60	0.00	3.887	0.101	1.202	0.137	0.0620	0.0775
108	BC24W18	3	100	0.00	4.900	0.101	1.203	0.183	0.0642	0.0380
108	BC24W18	4	93.19	0.00	6.935	0.101	1.197	0.279	0.0591	-0.059
108	BC24W18	5	97.60	0.00	8.908	0.102	1.191	0.224	0.0700	-0.098
108	BC24W18	6	100.8	0.00	11.11	0.101	1.202	0.177	0.0658	-0.090
108	BC24W18	7	94	-0.0	15.89	0.101	1.205	0.142	0.0656	-0.079
108	BC24W18	8	96.79	-0.0	26.07	0.100	1.216	0.135	0.0635	-0.068

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
109	BC24W18	1	97.60	-0.0	2.872	0.841	0.017	0.208	0.0439	-0.180
109	BC24W18	2	94.39	-0.0	3.887	0.973	0.013	0.228	0.0390	-0.184
109	BC24W18	3	96.79	-0.0	4.846	0.918	0.014	0.218	0.0400	-0.181
109	BC24W18	4	96.79	-0.0	6.861	0.861	0.016	0.213	0.0435	-0.179
109	BC24W18	5	95.19	-0.0	8.856	0.973	0.013	0.218	0.0441	-0.173
109	BC24W18	6	97.60	-0.0	10.83	0.936	0.014	0.220	0.0458	-0.175
109	BC24W18	7	93.60	-0.0	15.87	1.113	0.010	0.219	0.0408	-0.177
109	BC24W18	8	94.79	-0.0	25.79	1.024	0.011	0.232	0.0401	-0.178
110	BC24W18	1	95.60	-0.0	2.919	0.213	0.272	0.366	0.0452	-0.148
110	BC24W18	2	96.79	-0.0	3.914	0.211	0.277	0.375	0.0574	-0.181
110	BC24W18	3	97.19	-0.0	4.892	0.212	0.275	0.311	0.0567	-0.165
110	BC24W18	4	98.39	-0.0	6.883	0.211	0.277	0.255	0.0638	-0.133
110	BC24W18	5	98.79	-0.0	8.862	0.211	0.276	0.246	0.0641	-0.125
110	BC24W18	7	98.39	-0.0	10.86	0.215	0.266	0.244	0.0609	-0.118
110	BC24W18	8	94	-0.0	15.85	0.212	0.275	0.225	0.0652	-0.119
110	BC24W18	9	92.79	-0.0	25.82	0.213	0.272	0.222	0.0652	-0.112
111	BC24W18	1	96.39	-0.0	2.900	0.152	0.534	0.308	0.0512	-0.067
111	BC24W18	2	92	-0.0	3.870	0.151	0.537	0.307	0.0539	-0.090
111	BC24W18	3	98	-0.0	4.913	0.154	0.522	0.348	0.0590	-0.139
111	BC24W18	4	91.19	-0.0	6.909	0.151	0.542	0.263	0.0624	-0.134
111	BC24W18	5	99.19	-0.0	8.860	0.152	0.536	0.230	0.0637	-0.113
111	BC24W18	6	94.79	-0.0	10.87	0.152	0.532	0.214	0.0600	-0.105
111	BC24W18	7	97.19	-0.0	15.79	0.152	0.536	0.202	0.0617	-0.100
111	BC24W18	8	94.39	-0.0	25.86	0.152	0.534	0.198	0.0591	-0.092
112	BC24W18	1	50	-0.0	2.894	0.051	4.628	-1.14	0.1485	1.2122
112	BC24W18	2	46.8	-0.0	3.863	0.051	4.617	-1.13	0.1368	0.9187
112	BC24W18	3	50.39	-0.0	4.884	0.052	4.448	-0.95	0.0902	0.6651
112	BC24W18	4	47.59	-0.0	6.894	0.052	4.434	-0.69	0.0554	0.4512
112	BC24W18	5	53.2	-0.0	8.607	0.051	4.589	-0.46	0.0503	0.3648
112	BC24W18	6	50	-0.0	10.81	0.052	4.434	-0.27	0.0749	0.1836
112	BC24W18	7	47.59	-0.0	15.90	0.051	4.613	-0.66	0.0504	0.0224
112	BC24W18	8	49.2	-0.0	26.23	0.052	4.442	-0.03	0.0509	-0.029
113	BR24W18	2	0	0.00	2.865	0.592	0.035	0.124	0.0664	-0.034
113	BR24W18	3	0	0.00	3.842	0.649	0.029	0.148	0.0439	-0.055
113	BR24W18	4	0	0.00	4.850	0.596	0.034	0.142	0.0461	-0.057
113	BR24W18	5	0	-0.0	6.855	0.567	0.038	0.133	0.0511	-0.058
113	BR24W18	6	0	0.00	8.851	0.671	0.027	0.147	0.0464	-0.051
113	BR24W18	7	0	-0.0	10.80	0.570	0.038	0.130	0.0560	-0.049
113	BR24W18	8	0	-0.0	15.85	0.601	0.034	0.131	0.0488	-0.051
113	BR24W18	9	0	-0.0	25.87	0.568	0.038	0.136	0.0612	-0.047
114	BR24W18	1	0	-2.0	19.78	0.568	0.038	0.007	0.0571	0.0108
114	BR24W18	2	0	0.00	25.90	0.571	0.038	0.133	0.0493	-0.054
114	BR24W18	3	0	2.02	32.04	0.561	0.039	0.252	0.0589	-0.110
114	BR24W18	4	0	4.01	38.15	0.547	0.041	0.373	0.0640	-0.187
114	BR24W18	5	0	5.97	44.23	0.553	0.040	0.499	0.0850	-0.252
114	BR24W18	6	0	7.97	50.45	0.586	0.036	0.618	0.1007	-0.325
114	BR24W18	7	0	10.0	56.92	0.526	0.044	0.701	0.1373	-0.387
114	BR24W18	8	0	11.6	62.04	0.538	0.042	0.714	0.1792	-0.394

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
115	BR24W18	2	0	0.00	2.850	0.197	0.316	0.317	0.0590	-0.088
115	BR24W18	3	0	0.00	3.859	0.197	0.318	0.335	0.0649	-0.107
115	BR24W18	4	0	0.00	4.848	0.197	0.317	0.302	0.0713	-0.090
115	BR24W18	5	0	0.00	6.865	0.201	0.304	0.235	0.0602	-0.061
115	BR24W18	6	0	-0.0	8.849	0.200	0.309	0.223	0.0693	-0.058
115	BR24W18	7	0	-0.0	10.88	0.198	0.313	0.201	0.0699	-0.054
115	BR24W18	8	0	-0.0	15.91	0.199	0.312	0.193	0.0693	-0.049
115	BR24W18	9	0	-0.0	25.86	0.198	0.313	0.201	0.0714	-0.051
116	BR24W18	3	0	0.00	2.855	0.152	0.535	0.173	0.0735	0.0164
116	BR24W18	4	0	0.01	3.864	0.154	0.522	0.303	0.1137	-0.003
116	BR24W18	5	0	0.01	4.856	0.153	0.524	0.335	0.0678	-0.101
116	BR24W18	6	0	0.00	6.879	0.154	0.516	0.265	0.0714	-0.087
116	BR24W18	7	0	0.00	8.878	0.154	0.522	0.217	0.0718	-0.070
116	BR24W18	8	0	0.01	10.78	0.154	0.522	0.218	0.0645	-0.066
116	BR24W18	9	0	0.00	15.90	0.154	0.519	0.198	0.0668	-0.058
116	BR24W18	10	0	0.00	26.33	0.153	0.528	0.183	0.0708	-0.055
117	BR24W18	1	0	0.01	2.893	0.103	1.165	-0.45	0.0728	0.4485
117	BR24W18	2	0	0.02	3.898	0.103	1.153	-0.00	0.1051	0.1545
117	BR24W18	3	0	0.03	4.909	0.103	1.157	0.143	0.0778	0.0929
117	BR24W18	4	0	0.03	6.925	0.103	1.159	0.235	0.0801	-0.010
117	BR24W18	5	0	0.03	8.883	0.103	1.163	0.210	0.0811	-0.037
117	BR24W18	6	0	0.03	10.80	0.102	1.173	0.168	0.0773	-0.036
117	BR24W18	7	0	0.03	15.97	0.102	1.172	0.158	0.0665	-0.033
117	BR24W18	8	0	0.02	26.15	0.103	1.159	0.130	0.0663	-0.024
118	BR24W18	1	0	0.02	34.25	0.103	1.164	0.122	0.0694	-0.024
118	BR24W18	2	0	2.03	40.34	0.103	1.166	0.234	0.0719	-0.081
118	BR24W18	3	0	3.98	46.28	0.103	1.155	0.343	0.0775	-0.147
118	BR24W18	4	0	6.12	52.88	0.102	1.180	0.472	0.0924	-0.223
118	BR24W18	5	0	8.00	58.67	0.103	1.166	0.569	0.1051	-0.282
118	BR24W18	6	0	9.91	64.56	0.102	1.169	0.668	0.1341	-0.343
118	BR24W18	7	0	11.7	70.22	0.102	1.170	0.769	0.1793	-0.412
119	BR24W18	1	0	-0.0	2.882	0.051	4.733	-1.94	0.0448	1.2999
119	BR24W18	2	0	-0.0	3.917	0.051	4.765	-1.26	0.0346	0.6564
119	BR24W18	3	0	-0.0	4.911	0.052	4.581	-1.08	0.0629	0.4891
119	BR24W18	4	0	-0.0	6.882	0.050	4.778	-0.94	0.0943	0.4420
119	BR24W18	5	0	-0.0	8.886	0.052	4.582	-0.63	0.0689	0.3435
119	BR24W18	6	0	-0.0	10.99	0.050	4.780	-0.45	0.0906	0.2387
119	BR24W18	7	0	-0.0	15.80	0.050	4.782	-0.18	0.0884	0.0887
119	BR24W18	8	0	-0.0	25.89	0.049	4.985	-0.08	0.0767	0.0368
120	BR24W18	2	0	-0.0	3.897	0.149	0.555	0.303	0.0652	-0.042
120	BR24W18	3	25.6	-0.0	3.900	0.148	0.561	0.361	0.0631	-0.071
120	BR24W18	4	51.59	-0.0	3.903	0.148	0.559	0.384	0.0608	-0.092
120	BR24W18	5	72.79	-0.0	3.902	0.148	0.559	0.385	0.0610	-0.096
120	BR24W18	6	95.19	-0.0	3.916	0.148	0.559	0.387	0.0515	-0.067
121	BR24W18	1	96	0.00	3.923	0.103	1.151	0.181	0.0548	0.1251
121	BR24W18	2	74.79	0.00	3.921	0.103	1.165	0.159	0.0659	0.1089
121	BR24W18	3	54.39	0.00	3.919	0.103	1.157	0.120	0.0662	0.1338
121	BR24W18	4	27.6	0.00	3.921	0.103	1.167	0.053	0.0686	0.1650
121	BR24W18	5	0	0.00	3.922	0.103	1.157	0.016	0.0860	0.1638



RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
122	BR24W18	1	0	-0.0	3.905	0.050	4.881	-1.27	0.0105	0.6884
122	BR24W18	2	24	-0.0	3.908	0.052	4.517	-1.15	0.0091	0.6314
122	BR24W18	3	53.2	-0.0	3.908	0.051	4.699	-1.06	0.0703	0.5986
122	BR24W18	4	70.79	-0.0	3.905	0.052	4.526	-0.91	0.0957	0.6730
122	BR24W18	5	98.79	-0.0	3.924	0.051	4.697	-0.61	0.0729	0.7129
123	BR24W18	1	51.2	-0.0	2.874	0.052	4.522	-1.57	-0.021	0.9796
123	BR24W18	2	52.39	-0.0	3.894	0.051	4.693	-1.01	0.0379	0.6513
123	BR24W18	3	52.8	-0.0	4.900	0.051	4.707	-0.85	0.0858	0.6778
123	BR24W18	4	50.39	-0.0	6.896	0.052	4.548	-0.67	0.0739	0.5296
123	BR24W18	5	48	-0.0	8.908	0.051	4.723	-0.40	0.0628	0.3878
123	BR24W18	6	50.39	-0.0	10.87	0.049	5.148	-0.24	0.0787	0.2575
123	BR24W18	7	52.8	-0.0	15.97	0.050	4.919	-0.00	0.0405	0.0978
123	BR24W18	8	51.2	-0.0	26.09	0.051	4.733	-0.01	0.0336	0.0558
124	BR24W18	1	96.79	-0.0	2.905	0.052	0.019	0.152	0.0283	-0.071
124	BR24W18	2	92	-0.0	3.886	0.0796	0.019	0.126	0.0390	-0.050
124	BR24W18	3	96.39	-0.0	4.902	0.827	0.018	0.152	0.0342	-0.073
124	BR24W18	4	97.19	-0.0	6.850	0.747	0.022	0.178	0.0382	-0.118
124	BR24W18	5	97.19	-0.0	8.877	0.857	0.016	0.178	0.0355	-0.102
124	BR24W18	6	96	-0.0	10.90	0.836	0.017	0.192	0.0350	-0.134
124	BR24W18	7	98	-0.0	15.96	0.813	0.018	0.200	0.0385	-0.135
124	BR24W18	8	95.60	-0.0	25.78	0.894	0.015	0.199	0.0338	-0.124
125	BR24W18	1	99.19	-0.0	2.904	0.201	0.304	0.432	0.0485	-0.147
125	BR24W18	2	93.19	-0.0	3.868	0.201	0.306	0.349	0.0571	-0.086
125	BR24W18	3	100	-0.0	4.883	0.206	0.291	0.334	0.0520	-0.123
125	BR24W18	4	96	-0.0	6.913	0.203	0.298	0.250	0.0548	-0.068
125	BR24W18	5	98	-0.0	8.929	0.204	0.297	0.250	0.0551	-0.085
125	BR24W18	6	97.19	-0.0	10.90	0.204	0.296	0.243	0.0563	-0.080
125	BR24W18	7	96.39	-0.0	15.80	0.202	0.302	0.208	0.0588	-0.068
125	BR24W18	8	95.60	-0.0	26.02	0.204	0.296	0.221	0.0559	-0.065
126	BR24W18	1	93.60	-0.0	2.880	0.146	0.578	0.244	0.0379	0.0722
126	BR24W18	2	100.4	-0.0	3.894	0.147	0.569	0.417	0.0550	-0.115
126	BR24W18	3	94	-0.0	4.907	0.148	0.563	0.353	0.0486	-0.072
126	BR24W18	4	93.19	-0.0	6.877	0.147	0.568	0.224	0.0510	-0.024
126	BR24W18	5	99.60	-0.0	8.911	0.147	0.568	0.223	0.0610	-0.063
126	BR24W18	6	94.39	-0.0	10.85	0.147	0.573	0.167	0.0482	0.0052
126	BR24W18	7	99.60	-0.0	15.88	0.147	0.569	0.193	0.0594	-0.048
126	BR24W18	8	96	-0.0	26.05	0.148	0.565	0.178	0.0553	-0.026
127	BR24W18	1	101.2	0.00	2.932	0.103	1.159	0.120	0.0807	0.1531
127	BR24W18	2	95.19	0.01	3.938	0.104	1.142	0.199	0.0484	0.1162
127	BR24W18	3	95.60	0.01	4.958	0.103	1.154	0.313	0.0645	0.0195
127	BR24W18	4	98.79	0.00	6.963	0.103	1.158	0.279	0.0699	-0.056
127	BR24W18	5	100.4	0.00	8.899	0.103	1.168	0.219	0.0660	-0.036
127	BR24W18	6	96.79	0.00	10.90	0.103	1.157	0.172	0.0620	-0.014
127	BR24W18	7	100	-0.0	15.90	0.102	1.173	0.144	0.0665	-0.023
127	BR24W18	8	94	-0.0	25.89	0.102	1.169	0.115	0.0629	0.0053

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
128	BR24W14	11	0	-0.0	2.875	0.547	0.041	0.218	0.0498	-0.059
128	BR24W14	12	0	0.00	3.867	0.588	0.035	0.220	0.0471	-0.062
128	BR24W14	13	0	0.00	4.862	0.623	0.031	0.218	0.0457	-0.061
128	BR24W14	14	0	0.00	6.884	0.646	0.029	0.228	0.0440	-0.066
128	BR24W14	15	0	0.00	8.832	0.599	0.034	0.218	0.0462	-0.066
128	BR24W14	16	0	0.00	10.88	0.678	0.026	0.222	0.0431	-0.067
128	BR24W14	17	0	0.00	15.93	0.661	0.028	0.224	0.0448	-0.061
128	BR24W14	18	0	-0.0	26.15	0.634	0.030	0.213	0.0455	-0.066
129	BR24W14	1	0	-0.0	34.16	0.590	0.035	0.206	0.0482	-0.063
129	BR24W14	2	0	2.05	40.46	0.703	0.025	0.330	0.0447	-0.038
129	BR24W14	3	0	4.07	46.62	0.639	0.030	0.445	0.0532	-0.013
129	BR24W14	4	0	6.02	52.61	0.673	0.027	0.576	0.0645	0.0074
129	BR24W14	5	0	8.03	58.78	0.715	0.024	0.703	0.0825	0.0257
129	BR24W14	6	0	10.0	65.01	0.623	0.031	0.783	0.1174	0.0463
129	BR24W14	7	0	11.7	70.17	0.614	0.032	0.836	0.1604	0.0494
130	BR24W14	10	0	0.00	2.878	0.195	0.323	0.453	0.0590	0.0486
130	BR24W14	11	0	0.00	3.865	0.197	0.318	0.409	0.0677	0.0344
130	BR24W14	12	0	0.00	4.880	0.199	0.312	0.334	0.0690	0.0355
130	BR24W14	13	0	0.00	8.881	0.203	0.298	0.257	0.0627	0.0543
130	BR24W14	14	0	-0.0	10.91	0.200	0.307	0.243	0.0652	0.0524
130	BR24W14	15	0	-0.0	15.89	0.200	0.308	0.232	0.0694	0.0542
130	BR24W14	16	0	-0.0	25.85	0.199	0.312	0.228	0.0716	0.0544
131	BR24W14	1	0	0.00	25.86	0.149	0.551	0.229	0.0783	0.0729
131	BR24W14	2	0	0.00	15.89	0.147	0.567	0.239	0.0769	0.0723
131	BR24W14	3	0	0.00	10.88	0.149	0.558	0.245	0.0779	0.0731
131	BR24W14	4	0	0.00	8.868	0.148	0.561	0.249	0.0792	0.0735
131	BR24W14	5	0	0.01	4.881	0.147	0.567	0.420	0.0761	0.0768
131	BR24W14	6	0	0.02	3.873	0.147	0.566	0.498	0.0611	0.0841
131	BR24W14	7	0	0.02	2.872	0.147	0.571	0.463	0.0469	0.1402
132	BR24W14	1	0.4	0.00	2.856	0.099	1.246	-0.50	0.0181	0.3252
132	BR24W14	2	0	0.04	3.889	0.098	1.276	0.281	0.0802	0.2391
132	BR24W14	3	0	0.05	4.925	0.099	1.263	0.480	0.0573	0.1878
132	BR24W14	4	0	0.05	6.890	0.098	1.274	0.444	0.0783	0.1060
132	BR24W14	5	0	0.04	8.892	0.099	1.262	0.352	0.0854	0.0733
132	BR24W14	6	0	0.04	10.97	0.098	1.275	0.302	0.0822	0.0576
132	BR24W14	7	0	0.03	15.90	0.098	1.280	0.248	0.0800	0.0461
132	BR24W14	8	0	0.03	25.89	0.099	1.261	0.244	0.0722	0.0449
133	BR24W14	1	0	0.02	36.85	0.098	1.265	0.235	0.0740	0.0430
133	BR24W14	2	0	2.05	36.31	0.099	1.264	0.365	0.0743	0.0686
133	BR24W14	3	0	4.04	35.67	0.098	1.281	0.489	0.0809	0.0984
133	BR24W14	4	0	6.01	35.51	0.098	1.269	0.612	0.0918	0.1173
133	BR24W14	5	0	8.05	35.92	0.098	1.283	0.746	0.1121	0.1411
133	BR24W14	6	0	10.0	36.18	0.098	1.283	0.841	0.1481	0.1656
133	BR24W14	7	0	11.7	35.84	0.098	1.284	0.911	0.2022	0.1530

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
134	BR24W14	1	0	0.01	2.869	0.050	4.899	-1.49	-0.009	0.5532
134	BR24W14	2	0	0.01	3.886	0.049	5.116	-1.34	-0.069	0.2187
134	BR24W14	3	0	0.01	4.864	0.050	4.929	-0.76	0.0599	0.1027
134	BR24W14	4	0	0.02	6.894	0.049	5.126	-0.53	0.1106	0.1356
134	BR24W14	5	0	0.02	8.843	0.050	4.930	-0.31	0.1127	0.1325
134	BR24W14	6	0	0.02	10.89	0.050	4.938	-0.11	0.0874	0.0768
134	BR24W14	7	0	0.02	15.94	0.049	5.135	0.048	0.0969	0.0390
134	BR24W14	8	0	0.02	25.90	0.050	4.941	0.083	0.0678	-0.007
135	BR24W14	1	0	-0.0	3.885	0.150	0.548	0.506	0.0571	0.0871
135	BR24W14	2	18	-0.0	3.880	0.148	0.560	0.493	0.0612	0.0780
135	BR24W14	3	49.59	-0.0	3.889	0.148	0.563	0.485	0.0686	0.0748
135	BR24W14	4	76	-0.0	3.896	0.148	0.559	0.487	0.0638	0.0720
135	BR24W14	5	98.39	-0.0	3.894	0.149	0.555	0.464	0.0679	0.0715
136	BR24W14	1	100	0.01	3.930	0.100	1.222	0.618	0.0461	0.1831
136	BR24W14	2	75.60	0.01	3.927	0.100	1.223	0.586	0.0447	0.2005
136	BR24W14	3	51.59	0.01	3.934	0.100	1.220	0.563	0.0394	0.2144
136	BR24W14	4	26.4	0.00	3.918	0.100	1.226	0.487	0.0448	0.2233
136	BR24W14	5	0	0.00	3.922	0.100	1.231	0.367	0.0526	0.2237
137	BR24W14	1	0	-0.0	3.885	0.048	5.166	-1.28	-0.016	0.2279
137	BR24W14	2	23.6	-0.0	3.889	0.050	4.951	-1.09	-0.025	0.2654
137	BR24W14	3	51.2	-0.0	3.890	0.049	5.158	-1.07	0.0100	0.2816
138	BR24W14	1	49.2	-0.0	3.071	0.050	4.959	-1.39	-0.026	0.4303
138	BR24W14	2	50.8	-0.0	3.869	0.050	4.959	-0.99	0.0302	0.2759
138	BR24W14	3	50.8	-0.0	4.905	0.049	5.154	-0.47	0.1092	0.3372
138	BR24W14	4	50.8	-0.0	6.902	0.049	5.161	-0.17	0.0846	0.3420
138	BR24W14	5	49.59	-0.0	8.893	0.049	5.164	0.067	0.0991	0.2577
138	BR24W14	6	49.59	-0.0	10.88	0.049	5.068	0.117	0.0930	0.1409
138	BR24W14	7	49.59	-0.0	15.90	0.048	5.272	0.167	0.0770	0.0705
138	BR24W14	8	50.8	-0.0	25.89	0.049	5.075	0.133	0.0513	0.0261
139	BR24W14	1	100.8	-0.0	25.90	0.099	1.247	0.255	0.0747	0.0527
139	BR24W14	2	100.4	-0.0	15.92	0.100	1.233	0.260	0.0754	0.0498
139	BR24W14	3	99.60	-0.0	10.89	0.100	1.234	0.280	0.0801	0.0547
139	BR24W14	4	101.2	-0.0	8.902	0.100	1.220	0.309	0.0831	0.0625
139	BR24W14	5	100.8	0.00	6.923	0.100	1.229	0.428	0.0817	0.0954
139	BR24W14	6	100	0.01	4.937	0.100	1.229	0.601	0.0581	0.1411
139	BR24W14	7	99.60	0.01	3.927	0.100	1.220	0.644	0.0408	0.1986
139	BR24W14	8	98	0.01	3.101	0.100	1.220	0.557	0.0473	0.2472
140	BR24W14	1	100.8	-0.0	3.068	0.153	0.529	0.563	0.0562	0.0891
140	BR24W14	2	108	-0.0	3.881	0.153	0.529	0.448	0.0721	0.0738
140	BR24W14	3	102	-0.0	4.877	0.155	0.510	0.344	0.0756	0.0677
140	BR24W14	4	100	-0.0	6.887	0.151	0.538	0.274	0.0728	0.0695
140	BR24W14	5	99.60	-0.0	8.889	0.150	0.549	0.257	0.0748	0.0770
140	BR24W14	6	100.4	-0.0	10.86	0.149	0.554	0.234	0.0770	0.0741
140	BR24W14	7	100	-0.0	15.89	0.150	0.547	0.233	0.0757	0.0779
140	BR24W14	8	100	-0.0	25.88	0.150	0.548	0.236	0.0707	0.0782

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
141	BR24W14	1	100.4	-0.0	25.86	0.197	0.317	0.226	0.0712	0.0597
141	BR24W14	2	100.4	-0.0	15.86	0.196	0.321	0.234	0.0725	0.0585
141	BR24W14	3	100.4	-0.0	10.89	0.198	0.315	0.245	0.0690	0.0596
141	BR24W14	4	100	-0.0	8.860	0.196	0.320	0.243	0.0700	0.0576
141	BR24W14	5	101.2	-0.0	6.863	0.197	0.319	0.257	0.0720	0.0599
141	BR24W14	6	100.4	-0.0	4.932	0.197	0.318	0.282	0.0647	0.0474
141	BR24W14	7	99.60	-0.0	3.934	0.196	0.320	0.375	0.0739	0.0263
141	BR24W14	8	101.6	-0.0	3.028	0.195	0.325	0.444	0.0671	0.0404
142	BR24W14	1	99.19	-0.0	3.010	0.747	0.022	0.238	0.0466	-0.060
142	BR24W14	2	100.8	-0.0	3.854	0.787	0.020	0.231	0.0469	-0.059
142	BR24W14	3	100.4	-0.0	4.854	0.863	0.016	0.230	0.0500	-0.056
142	BR24W14	4	100	-0.0	6.875	0.847	0.017	0.224	0.0511	-0.057
142	BR24W14	5	103.6	-0.0	8.851	0.974	0.013	0.231	0.0488	-0.054
142	BR24W14	6	100.4	-0.0	10.86	0.781	0.020	0.227	0.0501	-0.057
142	BR24W14	7	100	-0.0	15.84	0.830	0.017	0.222	0.0498	-0.055
142	BR24W14	8	100.8	-0.0	25.86	0.773	0.020	0.221	0.0510	-0.056
143	BR24W10	9	0	0.01	2.869	0.593	0.035	0.243	0.0470	0.0631
143	BR24W10	10	0	0.01	3.861	0.609	0.033	0.236	0.0442	0.0573
143	BR24W10	11	0	0.01	4.852	0.565	0.038	0.232	0.0494	0.0576
143	BR24W10	12	0	0.01	6.677	0.607	0.033	0.233	0.0457	0.0532
143	BR24W10	13	0	0.00	8.821	0.573	0.037	0.217	0.0513	0.0489
143	BR24W10	14	0	0.00	10.84	0.563	0.038	0.220	0.0488	0.0472
143	BR24W10	15	0	0.00	15.83	0.556	0.040	0.217	0.0508	0.0464
143	BR24W10	16	0	0.00	25.83	0.565	0.038	0.212	0.0491	0.0476
144	BR24W10	1	0	-0.0	36.83	0.557	0.039	0.212	0.0508	0.0450
144	BR24W10	2	0	2.02	36.06	0.535	0.043	0.343	0.0489	0.1381
144	BR24W10	3	0	4.13	36.91	0.582	0.036	0.481	0.0538	0.2341
144	BR24W10	4	0	6.03	35.71	0.612	0.033	0.619	0.0608	0.3206
144	BR24W10	5	0	8.01	36.21	0.567	0.038	0.734	0.0806	0.4024
144	BR24W10	6	0	10.0	37.23	0.575	0.037	0.828	0.1142	0.4633
144	BR24W10	7	0	11.7	37.23	0.648	0.029	0.867	0.1623	0.4621
145	BR24W10	1	0	0.03	2.863	0.194	0.329	0.353	0.0633	0.2679
145	BR24W10	2	0	0.03	3.825	0.194	0.329	0.320	0.0724	0.2143
145	BR24W10	3	0	0.02	4.848	0.194	0.327	0.268	0.0750	0.1949
145	BR24W10	4	0	0.02	6.836	0.195	0.325	0.208	0.0668	0.1929
145	BR24W10	5	0	0.02	8.853	0.196	0.322	0.194	0.0682	0.1899
145	BR24W10	6	0	0.02	10.90	0.198	0.316	0.215	0.0621	0.1905
145	BR24W10	7	0	0.02	15.84	0.196	0.320	0.190	0.0702	0.1856
145	BR24W10	8	0	0.02	25.80	0.196	0.320	0.192	0.0683	0.1867
146	BR24W10	1	0	0.03	25.86	0.148	0.560	0.194	0.0740	0.2163
146	BR24W10	2	0	0.03	10.86	0.149	0.554	0.203	0.0760	0.2212
146	BR24W10	3	0	0.03	10.86	0.149	0.556	0.193	0.0754	0.2200
146	BR24W10	4	0	0.03	8.899	0.149	0.555	0.217	0.0716	0.2268
146	BR24W10	5	0	0.03	6.830	0.149	0.556	0.233	0.0815	0.2328
146	BR24W10	6	0	0.04	4.861	0.149	0.557	0.315	0.0730	0.2806
146	BR24W10	7	0	0.05	3.861	0.148	0.562	0.392	0.0686	0.3366
146	BR24W10	8	0	-0.0	2.892	0.147	0.571	0.488	0.0503	0.4194

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
147	BR24W10	1	2.4	-0.0	2.887	0.100	1.220	-0.26	0.0417	0.2598
147	BR24W10	2	0	0.00	3.868	0.100	1.224	0.588	0.0321	0.5624
147	BR24W10	3	0	0.00	4.927	0.100	1.220	0.575	0.0474	0.4792
147	BR24W10	4	0	-0.0	6.892	0.100	1.238	0.383	0.0823	0.3392
147	BR24W10	5	0	-0.0	8.914	0.100	1.219	0.294	0.0787	0.2508
147	BR24W10	6	0	-0.0	10.94	0.100	1.220	0.261	0.0747	0.2173
147	BR24W10	7	0	-0.0	15.95	0.100	1.235	0.227	0.0764	0.1929
147	BR24W10	8	0	-0.0	25.94	0.100	1.234	0.220	0.0746	0.1871
148	BR24W10	1	0	-0.0	36.63	0.099	1.248	0.215	0.0764	0.1826
148	BR24W10	2	0	2.06	37.38	0.100	1.235	0.346	0.0683	0.2826
148	BR24W10	3	0	4.01	37.19	0.099	1.245	0.451	0.0776	0.3722
148	BR24W10	4	0	6.00	37.92	0.100	1.236	0.595	0.0769	0.4672
148	BR24W10	5	0	8.00	35.98	0.099	1.240	0.709	0.0953	0.5591
148	BR24W10	6	0	10.0	36.53	0.100	1.227	0.819	0.1277	0.6116
148	BR24W10	7	0	11.7	37.22	0.100	1.237	0.870	0.1785	0.6276
149	BR24W10	6	0	-0.0	3.041	0.050	4.871	-1.00	0.0600	0.1149
149	BR24W10	7	0	-0.0	3.869	0.049	5.070	-0.91	0.0079	-0.077
149	BR24W10	8	0	-0.0	4.879	0.049	5.083	-0.55	0.0273	-0.018
149	BR24W10	9	0	-0.0	6.880	0.049	5.081	-0.17	0.1059	0.2708
149	BR24W10	10	0	-0.0	8.887	0.049	5.086	0.010	0.0961	0.3023
149	BR24W10	11	0	-0.0	10.87	0.050	4.895	0.085	0.1098	0.2677
149	BR24W10	12	0	-0.0	15.89	0.050	4.907	0.041	0.1190	0.1805
149	BR24W10	13	0	-0.0	25.87	0.050	4.903	0.018	0.1026	0.1163
150	BR24W10	1	0	-0.0	3.860	0.147	0.569	0.352	0.0774	0.3242
150	BR24W10	2	24.4	-0.0	3.861	0.149	0.557	0.334	0.0772	0.3023
150	BR24W10	3	50.8	-0.0	3.871	0.151	0.542	0.324	0.0730	0.2877
150	BR24W10	4	76	-0.0	3.860	0.150	0.550	0.309	0.0766	0.2761
150	BR24W10	5	100	-0.0	3.858	0.150	0.550	0.287	0.0796	0.2621
151	BR24W10	1	98.79	0.02	3.897	0.101	1.198	0.545	0.0566	0.5155
151	BR24W10	2	75.19	0.02	3.895	0.099	1.246	0.559	0.0586	0.5322
151	BR24W10	3	49.59	0.03	3.903	0.099	1.248	0.611	0.0464	0.5631
151	BR24W10	4	26.4	0.03	3.900	0.099	1.248	0.630	0.0444	0.5761
151	BR24W10	5	0	0.02	3.901	0.099	1.261	0.604	0.0393	0.5753
152	BR24W10	1	0	-0.0	3.869	0.048	5.276	-0.94	0.0096	-0.035
152	BR24W10	2	27.2	-0.0	3.875	0.049	5.058	-0.79	-0.015	0.0092
152	BR24W10	3	50.39	-0.0	3.869	0.049	5.085	-0.80	0.0188	0.0038
153	BR24W10	1	50	-0.0	3.037	0.049	5.079	-0.99	-0.020	0.0670
153	BR24W10	2	52.39	-0.0	3.867	0.049	5.086	-0.72	0.0186	0.0633
153	BR24W10	3	48.8	-0.0	4.874	0.049	5.090	-0.20	0.0933	0.3694
153	BR24W10	4	50.39	-0.0	6.885	0.048	5.298	0.393	0.0763	0.6936
153	BR24W10	5	48	-0.0	8.881	0.049	5.103	0.326	0.1026	0.5441
153	BR24W10	6	51.59	-0.0	10.88	0.050	4.906	0.212	0.1102	0.3571
153	BR24W10	7	49.2	-0.0	15.88	0.049	5.083	0.145	0.1035	0.2248
153	BR24W10	8	53.2	-0.0	25.89	0.049	5.090	0.044	0.0883	0.1222

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
154	BR24W10	1	104.8	-0.0	25.89	0.098	1.271	0.190	0.0796	0.1796
154	BR24W10	2	99.19	-0.0	15.89	0.098	1.273	0.187	0.0841	0.1823
154	BR24W10	3	99.19	-0.0	10.88	0.099	1.264	0.195	0.0896	0.1947
154	BR24W10	4	100.4	-0.0	8.905	0.098	1.269	0.238	0.0838	0.2203
154	BR24W10	5	102.4	0.00	6.896	0.099	1.261	0.302	0.0931	0.2850
154	BR24W10	6	102	0.01	4.900	0.098	1.278	0.448	0.0798	0.4137
154	BR24W10	7	100.8	0.02	3.895	0.098	1.279	0.549	0.0610	0.5404
154	BR24W10	8	99.19	0.03	3.073	0.098	1.269	0.642	0.0449	0.6603
155	BR24W10	1	102.4	-0.0	3.029	0.148	0.560	0.344	0.0764	0.3258
155	BR24W10	2	101.2	-0.0	3.884	0.151	0.542	0.301	0.0771	0.2647
155	BR24W10	3	100.4	-0.0	4.865	0.150	0.546	0.232	0.0856	0.2247
155	BR24W10	4	100	-0.0	6.853	0.150	0.546	0.189	0.0806	0.2162
155	BR24W10	5	101.6	-0.0	8.859	0.150	0.546	0.180	0.0745	0.2128
155	BR24W10	6	103.6	-0.0	10.89	0.150	0.543	0.178	0.0712	0.2103
155	BR24W10	7	100	-0.0	15.89	0.150	0.548	0.161	0.0768	0.2024
155	BR24W10	8	102.4	-0.0	25.83	0.149	0.554	0.153	0.0802	0.2046
156	BR24W10	1	96.79	-0.0	25.82	0.203	0.299	0.158	0.0730	0.1765
156	BR24W10	2	103.2	-0.0	15.86	0.203	0.300	0.155	0.0720	0.1713
156	BR24W10	3	106.4	-0.0	10.83	0.201	0.306	0.160	0.0761	0.1781
156	BR24W10	4	103.2	-0.0	8.843	0.200	0.307	0.157	0.0725	0.1750
156	BR24W10	5	97.19	-0.0	6.855	0.202	0.301	0.172	0.0738	0.1843
156	BR24W10	6	103.6	-0.0	4.854	0.204	0.295	0.203	0.0682	0.1774
156	BR24W10	7	106.4	-0.0	3.861	0.201	0.306	0.265	0.0870	0.1669
156	BR24W10	8	101.2	-0.0	3.020	0.199	0.311	0.285	0.0806	0.1883
157	BR24W10	1	104.8	-0.0	2.995	0.530	0.044	0.193	0.0579	0.0511
157	BR24W10	2	104.8	-0.0	3.850	0.530	0.044	0.196	0.0557	0.0477
157	BR24W10	3	98	-0.0	4.845	0.534	0.043	0.193	0.0516	0.0412
157	BR24W10	4	104	-0.0	6.848	0.545	0.041	0.191	0.0526	0.0409
157	BR24W10	5	98.39	-0.0	8.849	0.538	0.042	0.195	0.0568	0.0428
157	BR24W10	6	94	-0.0	10.85	0.523	0.045	0.179	0.0581	0.0379
157	BR24W10	7	103.2	-0.0	15.83	0.542	0.042	0.178	0.0567	0.0336
157	BR24W10	8	98	-0.0	25.83	0.527	0.044	0.179	0.0575	0.0377
158	BTR24W10	9	0	0.01	2.823	2.442	0.002	0.243	0.0525	0.0738
158	BTR24W10	10	0	0.00	3.813	2.075	0.002	0.224	0.0551	0.0658
158	BTR24W10	11	0	0.01	4.848	3.050	0.001	0.236	0.0461	0.0609
158	BTR24W10	12	0	0.01	6.820	2.549	0.001	0.229	0.0507	0.0618
158	BTR24W10	13	0	0.01	8.840	2.232	0.002	0.222	0.0513	0.0577
158	BTR24W10	14	0	0.00	10.89	2.108	0.002	0.216	0.0517	0.0553
158	BTR24W10	15	0	0.00	15.81	2.297	0.002	0.214	0.0498	0.0510
158	BTR24W10	16	0	0.00	26.04	2.937	0.001	0.223	0.0464	0.0548
159	BTR24W10	1	0	0.00	34.18	2.915	0.001	0.228	0.0464	0.0544
159	BTR24W10	2	0	1.98	40.18	4.402	0.000	0.337	0.0470	0.1363
159	BTR24W10	3	0	4.08	46.58	2.574	0.001	0.461	0.0579	0.2278
159	BTR24W10	4	0	6.07	52.67	4.210	0.000	0.583	0.0666	0.3119
159	BTR24W10	5	0	8.02	58.69	2.786	0.001	0.681	0.0883	0.3361
159	BTR24W10	6	0	9.95	64.63	2.320	0.002	0.769	0.1134	0.4449
159	BTR24W10	7	0	11.7	70.09	1.783	0.003	0.793	0.1697	0.4496

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
160	BTR24W10	1	0	0.04	2.880	0.199	0.312	0.338	0.0311	0.3477
160	BTR24W10	2	0	0.06	3.856	0.198	0.314	0.558	0.0349	0.4123
160	BTR24W10	3	0	0.01	4.898	0.199	0.310	0.559	0.0566	0.3418
160	BTR24W10	4	0	0.00	6.854	0.198	0.313	0.485	0.0987	0.2402
160	BTR24W10	5	0	0.00	8.884	0.198	0.315	0.435	0.1041	0.2056
160	BTR24W10	6	0	0.00	10.87	0.199	0.312	0.415	0.1051	0.1913
160	BTR24W10	7	0	-0.0	15.84	0.198	0.313	0.377	0.1094	0.1731
160	BTR24W10	8	0	-0.0	25.87	0.198	0.313	0.383	0.1049	0.1698
161	BTR24W10	1	0	-0.0	2.868	0.149	0.552	-0.17	-0.017	0.0309
161	BTR24W10	2	0	-0.0	3.835	0.149	0.556	0.150	0.0272	0.1971
161	BTR24W10	3	0	0.02	4.879	0.148	0.563	0.467	0.0301	0.3874
161	BTR24W10	4	0	0.02	6.911	0.148	0.561	0.575	0.0671	0.3693
161	BTR24W10	5	0	0.02	8.870	0.148	0.562	0.540	0.1013	0.3104
161	BTR24W10	6	0	0.01	10.94	0.147	0.567	0.483	0.1132	0.2803
161	BTR24W10	7	0	0.00	15.85	0.147	0.569	0.415	0.1186	0.2490
161	BTR24W10	8	0	0.00	26.01	0.148	0.564	0.393	0.1215	0.2383
162	BTR24W10	1	0.8	-0.0	2.861	0.102	1.179	-0.23	-0.113	0.0642
162	BTR24W10	2	0	-0.0	3.850	0.102	1.185	-0.38	-0.065	-0.060
162	BTR24W10	3	6	-0.0	4.856	0.102	1.175	-0.12	-0.024	-0.010
162	BTR24W10	4	0	0.00	6.865	0.102	1.191	0.153	0.0366	0.1733
162	BTR24W10	5	0	0.02	8.898	0.101	1.192	0.378	0.0550	0.3259
162	BTR24W10	6	0	0.03	10.92	0.101	1.195	0.470	0.0835	0.3603
162	BTR24W10	7	0	0.02	15.92	0.101	1.196	0.393	0.0995	0.3355
162	BTR24W10	8	0	0.01	25.89	0.101	1.211	0.347	0.0985	0.3111
163	BTR24W10	1	0	0.00	34.21	0.101	1.201	0.336	0.1015	0.3074
163	BTR24W10	2	0	2.02	40.34	0.101	1.201	0.458	0.0989	0.3923
163	BTR24W10	3	0	3.99	46.35	0.100	1.216	0.575	0.1088	0.4777
163	BTR24W10	4	0	6.04	52.68	0.100	1.218	0.691	0.1233	0.5556
163	BTR24W10	5	0	8.03	58.77	0.100	1.219	0.800	0.1561	0.6279
163	BTR24W10	6	0	10.0	65.07	0.100	1.221	0.857	0.2047	0.6488
163	BTR24W10	7	0	11.7	70.23	0.101	1.209	0.921	0.2495	0.6479
164	BTR24W10	1	0	-0.0	2.861	0.049	5.122	-1.38	0.0117	0.0627
164	BTR24W10	2	0	-0.0	3.866	0.050	4.923	-1.38	0.0298	-0.230
164	BTR24W10	3	0	-0.0	4.851	0.050	4.917	-1.06	-0.020	-0.354
164	BTR24W10	4	0	-0.0	6.877	0.051	4.740	-0.88	0.0281	-0.404
164	BTR24W10	5	0	-0.0	8.863	0.051	4.739	-0.61	0.0229	-0.344
164	BTR24W10	6	0	-0.0	10.97	0.050	4.933	-0.71	0.0529	-0.432
164	BTR24W10	7	0	-0.0	15.89	0.050	4.934	-0.26	0.0730	-0.120
164	BTR24W10	8	0	-0.0	26.05	0.050	4.941	0.058	0.1052	0.1672
165	BTR24W10	1	0	-0.0	3.850	0.153	0.529	0.243	0.0241	0.2787
165	BTR24W10	2	26	0.01	3.865	0.152	0.530	0.456	0.0201	0.4156
165	BTR24W10	3	49.2	0.02	3.868	0.152	0.531	0.611	0.0204	0.5008
165	BTR24W10	4	74	0.02	3.874	0.152	0.533	0.699	0.0104	0.5408
165	BTR24W10	5	97.19	0.03	3.870	0.151	0.539	0.710	0.0274	0.5423
166	BTR24W10	1	97.19	-0.0	3.852	0.103	1.151	-0.00	-0.004	0.1700
166	BTR24W10	2	70.39	-0.0	3.859	0.103	1.161	-0.05	-0.041	0.1106
166	BTR24W10	3	54	-0.0	3.865	0.103	1.153	-0.08	-0.028	0.0888
166	BTR24W10	4	25.6	-0.0	3.863	0.104	1.143	-0.09	-0.038	0.1122
166	BTR24W10	5	5.6	-0.0	3.844	0.102	1.170	-0.33	-0.060	-0.036

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
167	BTR24W10	1	0	-0.0	3.847	0.051	4.699	-1.30	0.0241	-0.213
167	BTR24W10	2	24.8	-0.0	3.845	0.051	4.701	-1.30	0.0137	-0.204
167	BTR24W10	3	48	-0.0	3.859	0.051	4.701	-1.21	-0.024	-0.236
168	BTR24W10	1	52.8	-0.0	2.871	0.052	4.531	-1.12	-0.013	0.0478
168	BTR24W10	2	50	-0.0	3.851	0.052	4.537	-1.18	-0.012	-0.199
168	BTR24W10	3	49.2	-0.0	4.867	0.052	4.542	-1.03	0.0014	-0.256
168	BTR24W10	4	52	-0.0	6.861	0.051	4.717	-0.88	-0.001	-0.356
168	BTR24W10	5	46.39	-0.0	8.851	0.052	4.536	-0.74	0.0464	-0.388
168	BTR24W10	6	50.8	-0.0	10.85	0.051	4.728	-0.62	0.0944	-0.311
168	BTR24W10	7	48.39	-0.0	15.93	0.051	4.731	-0.12	0.0979	0.1046
168	BTR24W10	8	46.8	-0.0	25.91	0.050	4.916	0.131	0.0830	0.2104
169	BTR24W10	1	97.60	-0.0	2.862	0.103	1.165	-0.12	-0.084	0.1592
169	BTR24W10	2	98.79	-0.0	3.888	0.101	1.192	0.039	-0.017	0.1778
169	BTR24W10	3	94.79	-0.0	4.885	0.102	1.182	0.321	0.0270	0.3273
169	BTR24W10	4	99.60	0.01	6.908	0.102	1.171	0.592	0.0385	0.5180
169	BTR24W10	5	94	0.01	8.887	0.102	1.183	0.587	0.0640	0.4708
169	BTR24W10	6	99.19	0.01	10.93	0.101	1.194	0.577	0.0938	0.4247
169	BTR24W10	7	98.39	-0.0	15.78	0.102	1.174	0.385	0.1075	0.3393
169	BTR24W10	8	98	-0.0	25.82	0.102	1.184	0.353	0.0990	0.3155
170	BTR24W10	1	96.39	-0.0	2.898	0.194	0.326	0.668	0.0254	0.5040
170	BTR24W10	2	96.39	-0.0	3.858	0.194	0.326	0.652	0.0462	0.4169
170	BTR24W10	3	96	-0.0	4.840	0.194	0.328	0.557	0.0736	0.3164
170	BTR24W10	4	96	-0.0	6.837	0.194	0.327	0.441	0.1088	0.2204
170	BTR24W10	5	96.39	-0.0	8.856	0.193	0.330	0.415	0.1070	0.2049
170	BTR24W10	6	96.39	-0.0	10.76	0.194	0.328	0.389	0.1110	0.1904
170	BTR24W10	7	96.79	-0.0	15.77	0.193	0.329	0.381	0.1114	0.1770
170	BTR24W10	8	96.39	-0.0	25.79	0.193	0.330	0.375	0.1090	0.1739
171	BTR24W10	1	96	-0.0	2.853	0.148	0.560	0.157	0.0185	0.2885
171	BTR24W10	2	95.19	0.00	3.911	0.148	0.561	0.697	0.0211	0.5439
171	BTR24W10	3	95.19	0.00	4.901	0.148	0.562	0.705	0.0412	0.5200
171	BTR24W10	4	94.79	-0.0	6.883	0.148	0.562	0.625	0.0830	0.3745
171	BTR24W10	5	94.79	-0.0	8.895	0.148	0.560	0.490	0.1168	0.2945
171	BTR24W10	6	94.79	-0.0	10.87	0.148	0.564	0.467	0.1111	0.2771
171	BTR24W10	7	94.39	-0.0	15.90	0.148	0.562	0.403	0.1236	0.2478
171	BTR24W10	8	94.39	-0.0	25.84	0.147	0.567	0.395	0.1199	0.2379
172	BTR24W10	1	94.39	-0.0	2.866	2.011	0.003	0.248	0.0491	0.0765
172	BTR24W10	2	94.39	-0.0	3.826	1.629	0.004	0.222	0.0536	0.0678
172	BTR24W10	3	94.39	-0.0	4.866	1.651	0.004	0.217	0.0514	0.0597
172	BTR24W10	4	94.79	-0.0	6.870	1.866	0.003	0.229	0.0472	0.0591
172	BTR24W10	5	95.19	-0.0	8.852	2.275	0.002	0.233	0.0444	0.0593
172	BTR24W10	6	95.19	-0.0	10.86	1.701	0.004	0.207	0.0545	0.0567
172	BTR24W10	7	95.60	-0.0	15.74	1.697	0.004	0.193	0.0557	0.0477
172	BTR24W10	8	95.60	-0.0	25.78	1.724	0.004	0.209	0.0526	0.0547
173	BTR24W14	9	0	0.03	2.843	5.210	0.000	0.240	0.0481	-0.053
173	BTR24W14	10	0	0.03	3.828	3.023	0.001	0.250	0.0487	-0.055
173	BTR24W14	11	0	0.03	4.831	2.772	0.001	0.241	0.0511	-0.055
173	BTR24W14	12	0	0.03	6.843	2.432	0.002	0.244	0.0525	-0.054
173	BTR24W14	13	0	0.03	8.845	2.920	0.001	0.237	0.0508	-0.057
173	BTR24W14	14	0	0.03	10.80	2.876	0.001	0.242	0.0495	-0.059
173	BTR24W14	15	0	0.02	15.90	2.471	0.002	0.228	0.0523	-0.059
173	BTR24W14	16	0	0.03	25.92	677.8	0.000	0.251	0.0438	-0.058



RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
174	BTR24W14	1	0	0.02	34.19	2.379	0.002	0.231	0.0502	-0.056
174	BTR24W14	4	0	2.07	40.45	2.605	0.001	0.356	0.0514	-0.028
174	BTR24W14	6	0	4.07	46.52	2.086	0.002	0.475	0.0595	-0.008
174	BTR24W14	7	0	6.00	52.45	2.111	0.002	0.586	0.0727	0.0128
174	BTR24W14	8	0	8.03	58.71	2.205	0.002	0.704	0.0920	0.0306
174	BTR24W14	9	0	9.91	64.54	2.168	0.002	0.779	0.1249	0.0467
175	BTR24W14	1	0	0.00	2.852	0.200	0.308	0.014	0.0505	0.1546
175	BTR24W14	2	0	0.02	3.868	0.200	0.308	0.256	0.0474	0.1218
175	BTR24W14	3	0	0.03	4.864	0.200	0.307	0.503	0.0541	0.0698
175	BTR24W14	4	0	0.04	6.866	0.199	0.311	0.625	0.0925	0.0049
175	BTR24W14	5	0	0.03	8.879	0.200	0.308	0.571	0.0990	-0.001
175	BTR24W14	6	0	0.03	10.90	0.200	0.309	0.545	0.1005	-0.003
175	BTR24W14	7	0	0.03	15.88	0.198	0.313	0.519	0.1019	-0.011
175	BTR24W14	8	0	0.02	25.88	0.199	0.310	0.499	0.1047	-0.010
176	BTR24W14	1	0	0.00	2.864	0.155	0.514	-0.26	-0.015	0.0378
176	BTR24W14	2	0	0.00	3.878	0.154	0.521	-0.14	0.0288	0.0225
176	BTR24W14	3	0	0.02	4.888	0.153	0.526	0.090	0.0589	0.0938
176	BTR24W14	4	0	0.04	6.859	0.153	0.527	0.524	0.0708	0.0651
176	BTR24W14	5	0	0.04	8.865	0.153	0.528	0.649	0.1015	0.0354
176	BTR24W14	6	0	0.04	10.79	0.153	0.523	0.593	0.1105	0.0382
176	BTR24W14	7	0	0.04	16.03	0.154	0.521	0.553	0.1078	0.0362
176	BTR24W14	8	0	0.03	25.88	0.153	0.529	0.530	0.1155	0.0331
177	BTR24W14	1	0	0.00	2.862	0.103	1.157	-0.62	-0.106	0.0832
177	BTR24W14	2	0.4	0.00	3.843	0.102	1.170	-0.46	-0.077	-0.034
177	BTR24W14	3	0	0.01	4.866	0.102	1.174	-0.31	-0.034	-0.072
177	BTR24W14	4	0	0.02	6.904	0.102	1.176	-0.10	0.0503	-0.018
177	BTR24W14	5	0	0.04	8.880	0.102	1.190	0.217	0.0840	0.0632
177	BTR24W14	6	0	0.05	10.96	0.102	1.191	0.468	0.0903	0.0804
177	BTR24W14	7	0	0.05	15.82	0.102	1.169	0.452	0.0936	0.0956
177	BTR24W14	8	0	0.04	25.87	0.101	1.192	0.410	0.0939	0.0904
178	BTR24W14	1	0	0.04	34.29	0.101	1.197	0.404	0.0958	0.0966
178	BTR24W14	2	0	2.01	40.24	0.101	1.198	0.523	0.0973	0.1151
178	BTR24W14	3	0	4.01	46.40	0.102	1.190	0.630	0.1096	0.1325
178	BTR24W14	4	0	6.05	52.63	0.102	1.191	0.770	0.1285	0.1498
178	BTR24W14	5	0	8.04	58.77	0.101	1.192	0.888	0.1647	0.1611
178	BTR24W14	6	0	9.98	64.79	0.101	1.194	0.975	0.2123	0.1485
178	BTR24W14	7	0	11.7	70.10	0.101	1.207	1.069	0.2726	0.1419
179	BTR24W14	1	0	-0.0	2.888	0.050	4.804	-1.59	-0.024	0.2804
179	BTR24W14	2	0	-0.0	3.864	0.050	4.813	-1.23	-0.063	0.0747
179	BTR24W14	3	0	-0.0	4.861	0.050	4.819	-1.04	-0.033	-0.021
179	BTR24W14	4	0	-0.0	6.850	0.050	4.821	-0.65	-0.007	-0.140
179	BTR24W14	5	0	-0.0	8.851	0.050	4.832	-0.63	0.0010	-0.194
179	BTR24W14	6	0	-0.0	10.97	0.050	4.835	-0.67	0.0043	-0.219
179	BTR24W14	7	0	0.00	15.80	0.050	4.833	-0.36	0.0289	-0.139
179	BTR24W14	8	0	0.00	25.84	0.050	4.845	-0.02	0.0847	0.0142

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
180	BTR24W14	1	0.4	-0.0	3.827	0.151	0.537	-0.14	0.0317	0.0504
180	BTR24W14	2	24.4	-0.0	3.845	0.152	0.535	0.018	0.0555	0.1330
180	BTR24W14	3	48.39	0.00	3.849	0.152	0.530	0.142	0.0475	0.1742
180	BTR24W14	4	75.19	0.00	3.843	0.151	0.539	0.269	0.0491	0.1906
180	BTR24W14	5	96.39	0.01	3.855	0.152	0.534	0.364	0.0383	0.1945
181	BTR24W14	1	97.60	-0.0	3.853	0.105	1.119	-0.36	-0.028	0.0304
181	BTR24W14	2	76	-0.0	3.849	0.104	1.134	-0.30	-0.046	0.0067
181	BTR24W14	3	48	-0.0	3.844	0.104	1.136	-0.37	-0.045	0.0250
181	BTR24W14	4	25.2	-0.0	3.839	0.103	1.151	-0.41	-0.074	0.0023
181	BTR24W14	5	2	-0.0	3.838	0.104	1.141	-0.46	-0.081	-0.044
182	BTR24W14	1	0	-0.0	3.857	0.052	4.576	-1.17	-0.053	0.0444
182	BTR24W14	2	23.2	-0.0	3.855	0.053	4.404	-1.21	-0.066	0.0540
182	BTR24W14	3	53.59	-0.0	3.850	0.052	4.417	-1.17	-0.099	0.0763
183	BTR24W14	1	49.2	-0.0	2.893	0.049	4.962	-1.79	-0.068	0.2703
183	BTR24W14	2	45.59	-0.0	3.860	0.049	4.980	-1.43	-0.063	0.1411
183	BTR24W14	3	55.2	-0.0	4.873	0.049	4.994	-1.15	-0.028	0.0067
183	BTR24W14	4	53.59	-0.0	6.861	0.049	5.031	-0.82	-0.023	-0.142
183	BTR24W14	5	48.8	-0.0	8.872	0.049	5.158	-0.82	-0.002	-0.206
183	BTR24W14	6	44	-0.0	10.89	0.050	4.956	-0.59	-0.014	-0.176
183	BTR24W14	7	56.8	-0.0	15.92	0.049	4.962	-0.15	0.0651	0.0170
183	BTR24W14	8	52.8	-0.0	26.01	0.048	5.168	-0.03	0.0855	0.0372
184	BTR24W14	1	96.39	-0.0	2.841	0.104	1.127	-0.40	-0.056	0.0872
184	BTR24W14	2	97.60	-0.0	3.847	0.105	1.116	-0.25	0.0076	0.0783
184	BTR24W14	3	98.79	-0.0	4.874	0.103	1.150	-0.01	0.0490	0.1110
184	BTR24W14	4	95.19	0.00	6.895	0.104	1.139	0.372	0.0625	0.1640
184	BTR24W14	5	100.8	0.01	8.897	0.104	1.141	0.592	0.0785	0.1266
184	BTR24W14	6	95.60	0.01	10.87	0.103	1.151	0.652	0.0948	0.1081
184	BTR24W14	7	96.39	0.00	15.80	0.103	1.151	0.507	0.1107	0.1024
184	BTR24W14	8	100.8	0.00	26.11	0.103	1.149	0.482	0.1034	0.1003
185	BTR24W14	1	94.79	-0.0	2.903	0.202	0.302	0.571	0.0293	0.1371
185	BTR24W14	2	102.4	-0.0	3.870	0.203	0.298	0.655	0.0436	0.0803
185	BTR24W14	3	96	-0.0	4.891	0.202	0.301	0.658	0.0656	0.0305
185	BTR24W14	4	99.19	-0.0	6.878	0.202	0.302	0.578	0.0962	0.0072
185	BTR24W14	5	95.60	-0.0	8.896	0.203	0.300	0.535	0.0957	-0.001
185	BTR24W14	6	96.79	-0.0	10.98	0.203	0.300	0.522	0.0957	-0.004
185	BTR24W14	7	97.19	-0.0	15.96	0.201	0.305	0.497	0.1006	-0.010
185	BTR24W14	8	97.60	-0.0	26.11	0.203	0.300	0.492	0.0982	-0.007
186	BTR24W14	1	96	-0.0	2.851	0.150	0.548	-0.13	0.0409	0.1723
186	BTR24W14	2	94.39	-0.0	3.855	0.150	0.550	0.376	0.0390	0.2010
186	BTR24W14	3	96.39	0.00	4.871	0.150	0.550	0.575	0.0391	0.1553
186	BTR24W14	4	94.39	0.00	6.886	0.150	0.550	0.686	0.0762	0.0635
186	BTR24W14	5	94	-0.0	8.883	0.150	0.550	0.618	0.1093	0.0471
186	BTR24W14	6	95.60	-0.0	10.87	0.149	0.551	0.583	0.1075	0.0438
186	BTR24W14	7	96.79	-0.0	15.81	0.150	0.550	0.539	0.1105	0.0399
186	BTR24W14	8	98.39	-0.0	25.84	0.149	0.557	0.509	0.1135	0.0351

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
187	BTR24W14	1	96	-0.0	2.854	74.83	0.000	0.241	0.0431	-0.055
187	BTR24W14	2	96	-0.0	3.833	410.6	0.000	0.230	0.0473	-0.056
187	BTR24W14	3	96	-0.0	4.841	408.6	0.000	0.237	0.0464	-0.055
187	BTR24W14	4	96	-0.0	6.867	206.6	0.000	0.232	0.0471	-0.055
187	BTR24W14	5	96	-0.0	8.838	306.4	0.000	0.233	0.0481	-0.056
187	BTR24W14	6	96.39	-0.0	10.82	124.0	0.000	0.237	0.0452	-0.054
187	BTR24W14	7	96.39	-0.0	15.82	265.1	0.000	0.227	0.0495	-0.056
187	BTR24W14	8	96.39	-0.0	25.91	102.2	0.000	0.229	0.0471	-0.055
188	BTR24W18	9	0	10.0	30.96	0	*****	0.146	0.0300	0.2832
188	BTR24W18	10	0	-0.0	3.026	43.90	0.000	0.253	0.0466	-0.173
188	BTR24W18	11	0	-0.0	3.852	43.18	0.000	0.258	0.0465	-0.173
188	BTR24W18	12	0	-0.0	4.882	37.49	0.000	0.262	0.0467	-0.173
188	BTR24W18	13	0	-0.0	6.876	30.67	0.000	0.256	0.0466	-0.173
188	BTR24W18	14	0	-0.0	8.866	40.89	0.000	0.260	0.0475	-0.172
188	BTR24W18	15	0	-0.0	10.91	35.29	0.000	0.252	0.0483	-0.170
188	BTR24W18	16	0	-0.0	15.86	39.80	0.000	0.246	0.0479	-0.172
188	BTR24W18	17	0	-0.0	25.87	40.00	0.000	0.249	0.0483	-0.167
189	BTR24W18	1	0	-0.0	37.08	29.68	0.000	0.258	0.0421	-0.165
189	BTR24W18	2	0	2.05	36.76	40.20	0.000	0.375	0.0512	-0.202
189	BTR24W18	3	0	4.02	36.70	46.66	0.000	0.504	0.0619	-0.241
189	BTR24W18	4	0	6.05	36.70	44.31	0.000	0.621	0.0819	-0.279
189	BTR24W18	5	0	8.02	36.76	27.52	0.000	0.767	0.1010	-0.313
189	BTR24W18	6	0	10.0	36.73	52.90	0.000	0.834	0.1514	-0.346
189	BTR24W18	7	0	11.6	36.72	68.01	0.000	0.858	0.2027	-0.365
190	BTR24W18	1	0	-0.0	3.039	0.198	0.314	-0.16	0.0412	0.1933
190	BTR24W18	2	0	-0.0	3.895	0.198	0.315	0.019	0.0597	0.0927
190	BTR24W18	3	0	-0.0	4.864	0.198	0.315	0.305	0.0620	-0.052
190	BTR24W18	4	0	0.00	6.916	0.198	0.316	0.668	0.0933	-0.276
190	BTR24W18	5	0	0.00	8.908	0.197	0.317	0.634	0.1023	-0.260
190	BTR24W18	6	0	0.00	10.89	0.197	0.316	0.595	0.1048	-0.253
190	BTR24W18	7	0	-0.0	15.88	0.197	0.319	0.578	0.1054	-0.244
190	BTR24W18	8	0	-0.0	25.86	0.198	0.316	0.568	0.1078	-0.237
191	BTR24W18	1	0	0.00	25.87	0.149	0.554	0.541	0.1157	-0.182
191	BTR24W18	2	0	0.00	15.90	0.149	0.556	0.558	0.1175	-0.188
191	BTR24W18	3	0	0.01	10.89	0.149	0.552	0.615	0.1119	-0.214
191	BTR24W18	4	0	0.01	8.891	0.148	0.558	0.658	0.1025	-0.234
191	BTR24W18	5	0	0.00	6.888	0.148	0.559	0.381	0.0857	-0.103
191	BTR24W18	6	0	-0.0	4.851	0.149	0.555	-0.10	0.0565	0.0546
191	BTR24W18	7	0	-0.0	3.904	0.149	0.555	-0.22	0.0302	0.0817
191	BTR24W18	8	0	-0.0	3.017	0.149	0.556	-0.25	-0.017	0.1074
192	BTR24W18	1	0	-0.0	3.031	0.099	1.246	-0.46	-0.107	0.1416
192	BTR24W18	2	0	-0.0	3.869	0.099	1.248	-0.38	-0.075	0.0940
192	BTR24W18	3	0	-0.0	4.859	0.099	1.251	-0.35	-0.037	0.0093
192	BTR24W18	4	0	0.00	6.879	0.099	1.250	-0.18	0.0449	0.0315
192	BTR24W18	5	0	0.00	8.892	0.099	1.253	0.075	0.0831	0.0088
192	BTR24W18	6	0	0.02	10.9	0.099	1.242	0.361	0.1011	-0.083
192	BTR24W18	7	0	0.02	15.91	0.099	1.254	0.368	0.1028	-0.054
192	BTR24W18	8	0	0.02	25.88	0.099	1.253	0.338	0.1035	-0.034

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
193	BTR24W18	1	0	0.01	37.05	0.098	1.267	0.315	0.1027	-0.027
193	BTR24W18	2	0	2.04	37.13	0.100	1.233	0.427	0.1076	-0.071
193	BTR24W18	3	0	4.06	37.01	0.099	1.246	0.569	0.1124	-0.114
193	BTR24W18	4	0	6.05	37.03	0.100	1.236	0.677	0.1220	-0.149
193	BTR24W18	5	0	8.00	36.77	0.099	1.248	0.808	0.1542	-0.203
193	BTR24W18	6	0	10.0	36.75	0.099	1.263	0.900	0.2141	-0.252
193	BTR24W18	7	0	11.6	36.87	0.099	1.263	0.932	0.2625	-0.280
194	BTR24W18	1	0	-0.0	3.010	0.050	4.957	-1.22	-0.078	0.4637
194	BTR24W18	2	0	-0.0	3.911	0.049	5.152	-1.06	-0.068	0.2934
194	BTR24W18	3	0	-0.0	4.863	0.049	5.158	-0.98	-0.034	0.2470
194	BTR24W18	4	0	-0.0	6.866	0.049	5.162	-0.68	-0.031	0.1129
194	BTR24W18	5	0	0.00	8.874	0.049	5.162	-0.53	-0.046	0.0715
194	BTR24W18	6	0	0.00	10.87	0.049	5.159	-0.59	-0.032	0.1117
194	BTR24W18	7	0	0.00	15.87	0.049	5.163	-0.48	0.0193	0.1650
194	BTR24W18	8	0	0.00	25.89	0.048	5.167	-0.21	0.0455	0.1865
195	BTR24W18	1	0	-0.0	3.855	0.150	0.549	-0.16	0.0378	0.0899
195	BTR24W18	2	24.4	0.00	3.856	0.149	0.556	-0.09	0.0597	0.1312
195	BTR24W18	3	50	0.00	3.853	0.149	0.558	-0.00	0.0597	0.1622
195	BTR24W18	4	74.79	0.00	3.862	0.149	0.552	0.031	0.0567	0.1687
195	BTR24W18	5	101.2	0.00	3.860	0.149	0.554	0.043	0.0616	0.1683
196	BTR24W18	1	99.60	0.00	3.861	0.098	1.270	-0.39	-0.026	0.1235
196	BTR24W18	2	75.60	0.00	3.870	0.099	1.252	-0.35	-0.036	0.1266
196	BTR24W18	3	49.59	0.00	3.868	0.099	1.253	-0.37	-0.037	0.0947
196	BTR24W18	4	26	0.00	3.865	0.099	1.256	-0.38	-0.051	0.0945
196	BTR24W18	5	0	0.00	3.870	0.099	1.253	-0.39	-0.059	0.0726
197	BTR24W18	1	0	0.01	3.871	0.049	5.044	-1.08	-0.046	0.3299
197	BTR24W18	2	24.4	0.01	3.876	0.050	4.849	-1.03	-0.086	0.3296
197	BTR24W18	3	50	0.01	3.871	0.050	4.853	-0.99	-0.088	0.3208
198	BTR24W18	1	52	0.00	3.042	0.048	5.265	-1.30	-0.085	0.5398
198	BTR24W18	2	50.39	0.01	3.879	0.049	5.048	-1.02	-0.087	0.3217
198	BTR24W18	3	50.8	0.01	4.882	0.048	5.270	-1.01	-0.050	0.2852
198	BTR24W18	4	51.2	0.01	6.902	0.049	5.060	-0.69	-0.046	0.1398
198	BTR24W18	5	50.39	0.01	8.873	0.049	5.056	-0.82	-0.011	0.1215
198	BTR24W18	6	51.2	0.01	10.87	0.048	5.273	-0.78	-0.019	0.1798
198	BTR24W18	7	49.59	0.01	15.92	0.049	5.062	-0.43	0.0476	0.2028
198	BTR24W18	8	49.2	0.01	25.87	0.048	5.275	-0.28	0.0868	0.2021
199	BTR24W18	1	100.4	0.02	25.89	0.099	1.249	0.326	0.1052	-0.028
199	BTR24W18	2	99.60	0.03	15.94	0.099	1.262	0.376	0.1022	-0.040
199	BTR24W18	3	99.60	0.04	10.95	0.099	1.251	0.522	0.0996	-0.113
199	BTR24W18	4	100	0.03	8.890	0.099	1.264	0.268	0.0980	-0.003
199	BTR24W18	5	100.4	0.01	6.879	0.099	1.263	-0.04	0.0763	0.1359
199	BTR24W18	6	99.60	0.00	4.889	0.099	1.252	-0.27	0.0387	0.1124
199	BTR24W18	7	99.19	0.00	3.891	0.099	1.252	-0.35	-0.002	0.1243
199	BTR24W18	8	98	0.00	3.023	0.099	1.253	-0.39	-0.049	0.1570

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
200	BTR24W18	1	98.79	0.00	3.018	0.147	0.569	-0.13	0.0596	0.2444
200	BTR24W18	2	99.19	0.00	3.871	0.148	0.564	0.050	0.0646	0.1704
200	BTR24W18	3	99.60	0.01	4.883	0.148	0.565	0.262	0.0589	0.0515
200	BTR24W18	4	99.19	0.02	6.886	0.148	0.565	0.634	0.0807	-0.198
200	BTR24W18	5	99.19	0.02	8.901	0.147	0.570	0.648	0.1084	-0.221
200	BTR24W18	6	98.39	0.02	10.94	0.147	0.566	0.586	0.1147	-0.203
200	BTR24W18	7	99.60	0.01	15.86	0.147	0.570	0.561	0.1162	-0.191
200	BTR24W18	8	101.2	0.01	25.83	0.147	0.571	0.530	0.1184	-0.183
201	BTR24W18	1	100.4	0.01	25.83	0.198	0.315	0.562	0.1088	-0.235
201	BTR24W18	2	100	0.01	15.86	0.197	0.317	0.572	0.1100	-0.241
201	BTR24W18	3	100.4	0.01	10.97	0.198	0.313	0.608	0.1010	-0.249
201	BTR24W18	4	99.60	0.01	8.919	0.199	0.311	0.610	0.1008	-0.253
201	BTR24W18	5	100	0.01	6.855	0.198	0.313	0.671	0.0998	-0.273
201	BTR24W18	6	101.6	0.01	4.862	0.198	0.315	0.616	0.0681	-0.228
201	BTR24W18	7	98.39	0.01	3.891	0.200	0.309	0.408	0.0462	-0.058
201	BTR24W18	8	99.60	0.00	3.044	0.198	0.315	0.194	0.0513	0.0737
202	BTR24W18	1	99.60	-0.0	3.039	19.99	0.000	0.255	0.0460	-0.170
202	BTR24W18	2	100.8	-0.0	3.875	23.36	0.000	0.256	0.0469	-0.170
202	BTR24W18	3	101.2	-0.0	4.872	17.24	0.000	0.257	0.0436	-0.168
202	BTR24W18	4	99.19	-0.0	6.855	22.21	0.000	0.250	0.0510	-0.168
202	BTR24W18	5	100	-0.0	8.864	22.21	0.000	0.253	0.0463	-0.165
202	BTR24W18	6	100	-0.0	10.91	20.55	0.000	0.253	0.0514	-0.165
202	BTR24W18	7	99.19	-0.0	15.85	17.98	0.000	0.246	0.0476	-0.163
202	BTR24W18	8	102.4	-0.0	25.94	19.29	0.000	0.258	0.0476	-0.166
203	BTR24	9	0	0.00	3.007	36.04	0.000	0.023	0.0391	-0.018
203	BTR24	10	0	0.00	3.855	36.70	0.000	0.031	0.0354	-0.021
203	BTR24	11	0	0.00	4.829	43.47	0.000	0.032	0.0368	-0.022
203	BTR24	12	0	0.00	6.874	52.23	0.000	0.026	0.0382	-0.022
203	BTR24	13	0	0.00	8.852	39.63	0.000	0.035	0.0362	-0.021
203	BTR24	14	16	-0.0	15.55	43.98	0.000	0.023	0.0417	-0.020
203	BTR24	15	0	-0.0	15.88	62.43	0.000	0.024	0.0387	-0.026
203	BTR24	16	0	-0.0	25.85	48.76	0.000	0.028	0.0363	-0.024
204	BTR24	1	0	0.00	25.86	0.198	0.316	0.093	0.0973	0.0281
204	BTR24	2	0	0.00	15.82	0.198	0.313	0.087	0.1003	0.0266
204	BTR24	3	0	0.00	10.91	0.199	0.312	0.095	0.1001	0.0312
204	BTR24	4	0	0.00	8.799	0.200	0.309	0.096	0.1018	0.0342
204	BTR24	5	0	0.01	6.821	0.199	0.312	0.102	0.0992	0.0351
204	BTR24	6	0	0.00	4.814	0.199	0.310	0.026	0.0667	0.0889
204	BTR24	7	0	0.01	3.865	0.196	0.321	-0.02	0.0557	0.1382
204	BTR24	8	1.6	0.00	3.000	0.195	0.324	-0.05	0.0559	0.1461
205	BTR24	1	0	0.01	3.018	0.149	0.555	-0.08	0.0032	0.0857
205	BTR24	2	0	0.00	3.815	0.148	0.559	-0.11	0.0388	0.0750
205	BTR24	3	0	0.01	4.834	0.148	0.566	-0.05	0.0614	0.1016
205	BTR24	4	0	0.01	6.865	0.148	0.561	0.041	0.0808	0.0884
205	BTR24	5	0	0.01	8.859	0.147	0.566	0.096	0.1084	0.0673
205	BTR24	6	0	0.01	10.84	0.149	0.558	0.085	0.1141	0.0666
205	BTR24	7	0	0.01	15.81	0.148	0.562	0.076	0.1138	0.0645
205	BTR24	8	0	0.01	25.92	0.148	0.565	0.073	0.1108	0.0600

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
206	BTR24	1	0	0.02	25.93	0.100	1.230	0.002	0.1130	0.1283
206	BTR24	2	0	0.02	15.83	0.100	1.233	0.008	0.1172	0.1299
206	BTR24	3	0	0.03	10.88	0.100	1.220	0.029	0.0883	0.0967
206	BTR24	4	0	0.03	8.812	0.100	1.221	-0.04	0.0800	0.0854
206	BTR24	5	0	0.03	6.875	0.100	1.220	-0.08	0.0508	0.0340
206	BTR24	6	0	0.02	4.883	0.101	1.208	-0.18	-0.000	-0.043
206	BTR24	7	0	0.02	3.866	0.100	1.223	-0.22	-0.053	-0.017
206	BTR24	8	0	0.02	3.027	0.099	1.246	-0.25	-0.090	0.0388
207	BTR24	1	53.59	0.02	3.035	0.049	5.000	-0.76	-0.067	0.0426
207	BTR24	2	46.8	0.02	3.876	0.049	5.000	-0.65	-0.058	-0.046
207	BTR24	3	50.8	0.02	4.850	0.048	5.206	-0.49	-0.040	-0.123
207	BTR24	4	52	0.03	6.907	0.048	5.209	-0.28	-0.039	-0.168
207	BTR24	5	50.8	0.03	8.883	0.049	5.004	-0.25	-0.013	-0.111
207	BTR24	6	48.39	0.03	10.89	0.048	5.218	-0.20	0.0014	-0.086
207	BTR24	7	52.8	0.03	15.94	0.049	5.008	-0.11	0.0317	0.0397
207	BTR24	8	45.59	0.02	25.86	0.049	5.015	-0.09	0.0665	0.0894
208	BTR24	1	102.8	0.02	25.85	0.099	1.253	-0.00	0.1135	0.1285
208	BTR24	2	99.19	0.03	15.90	0.100	1.239	0.018	0.1066	0.1331
208	BTR24	3	96.79	0.03	10.91	0.099	1.240	0.052	0.1069	0.1231
208	BTR24	4	96.79	0.03	8.845	0.099	1.242	0.002	0.0956	0.1408
208	BTR24	5	102	0.03	6.872	0.099	1.252	-0.04	0.0781	0.1555
208	BTR24	6	101.6	0.03	4.869	0.099	1.241	-0.14	0.0397	0.0949
208	BTR24	7	97.60	0.02	3.867	0.100	1.231	-0.20	0.0088	0.0843
208	BTR24	8	106	0.02	3.069	0.099	1.245	-0.21	-0.033	0.0977
209	BTR24	1	100	0.01	3.057	0.150	0.547	-0.07	0.0612	0.2077
209	BTR24	2	94	0.01	3.849	0.150	0.547	-0.00	0.0655	0.2076
209	BTR24	3	98	0.01	4.878	0.150	0.548	0.032	0.0761	0.1512
209	BTR24	4	101.2	0.01	6.879	0.150	0.549	0.100	0.0983	0.0785
209	BTR24	5	100	0.01	8.847	0.150	0.548	0.088	0.1159	0.0662
209	BTR24	6	95.19	0.00	10.87	0.150	0.549	0.077	0.1140	0.0634
209	BTR24	7	102	0.01	15.91	0.150	0.548	0.086	0.1075	0.0589
209	BTR24	8	95.60	0.00	25.85	0.149	0.554	0.084	0.1079	0.0570
210	BTR24	1	101.2	0.00	25.84	0.198	0.315	0.101	0.0948	0.0272
210	BTR24	2	97.19	0.00	15.87	0.199	0.313	0.090	0.0993	0.0270
210	BTR24	3	103.6	0.00	8.872	0.198	0.315	0.094	0.0999	0.0324
210	BTR24	4	98	0.00	6.839	0.199	0.312	0.094	0.1026	0.0358
210	BTR24	5	102.8	0.01	4.837	0.199	0.312	0.093	0.0787	0.0564
210	BTR24	6	95.19	0.01	3.818	0.199	0.311	0.061	0.0660	0.1138
210	BTR24	7	101.2	0.01	3.017	0.199	0.311	0.044	0.0593	0.1562
211	BTR24	1	91.19	-0.0	3.008	37.59	0.000	0.021	0.0374	-0.025
211	BTR24	2	100	-0.0	3.816	34.01	0.000	0.025	0.0373	-0.025
211	BTR24	3	99.19	0.00	4.841	27.47	0.000	0.032	0.0364	-0.023
211	BTR24	4	96.79	0.00	6.833	24.95	0.000	0.043	0.0345	-0.020
211	BTR24	5	100.4	-0.0	8.845	40.28	0.000	0.023	0.0378	-0.025
211	BTR24	6	100.4	0.00	10.80	25.39	0.000	0.037	0.0336	-0.024
211	BTR24	7	100	0.00	15.83	24.09	0.000	0.039	0.0318	-0.023
211	BTR24	8	99.19	-0.0	25.87	27.18	0.000	0.035	0.0349	-0.024

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
212	BTR24W14S	9	0	-0.0	37.07	29.36	0.000	0.241	0.0450	-0.146
212	BTR24W14S	10	0	2.00	37.03	90.15	0.000	0.345	0.0496	-0.177
212	BTR24W14S	11	0	4.01	37.10	62.77	0.000	0.469	0.0590	-0.209
212	BTR24W14S	12	0	6.00	37.00	58.49	0.000	0.589	0.0714	-0.234
212	BTR24W14S	13	0	8.00	37.10	71.20	0.000	0.708	0.0957	-0.266
212	BTR24W14S	14	0	10.0	37.33	41.43	0.000	0.843	0.1409	-0.317
212	BTR24W14S	15	0	11.6	37.46	59.91	0.000	0.898	0.1886	-0.341
213	BTR24W14S	1	0	-0.0	3.083	76.37	0.000	0.234	0.0483	-0.150
213	BTR24W14S	2	0	-0.0	3.879	90.15	0.000	0.237	0.0494	-0.151
213	BTR24W14S	3	0	-0.0	4.902	90.59	0.000	0.229	0.0517	-0.152
213	BTR24W14S	4	0	-0.0	6.891	59.33	0.000	0.243	0.0477	-0.151
213	BTR24W14S	5	0	-0.0	8.856	104.4	0.000	0.228	0.0501	-0.150
213	BTR24W14S	6	0	-0.0	10.88	50.39	0.000	0.246	0.0468	-0.149
213	BTR24W14S	7	0	0.00	15.91	145.9	0.000	0.238	0.0507	-0.152
213	BTR24W14S	8	0	0.00	25.87	221.5	0.000	0.231	0.0497	-0.151
214	BTR24W14S	1	0	0.03	37.14	0.099	1.241	0.389	0.1099	-0.073
214	BTR24W14S	2	0	2.04	37.15	0.099	1.253	0.518	0.1067	-0.109
214	BTR24W14S	3	0	4.04	35.19	0.099	1.243	0.640	0.1203	-0.149
214	BTR24W14S	4	0	5.99	36.72	0.099	1.244	0.736	0.1339	-0.176
214	BTR24W14S	5	0	8.00	37.66	0.099	1.257	0.865	0.1782	-0.224
214	BTR24W14S	6	0	10.0	36.77	0.099	1.248	0.958	0.2414	-0.267
214	BTR24W14S	7	0	11.6	37.72	0.099	1.249	1.009	0.2787	-0.281
215	BTR24W14S	1	0	-0.0	3.031	0.099	1.257	-0.59	-0.108	0.1169
215	BTR24W14S	2	0	-0.0	3.950	0.098	1.283	-0.44	-0.075	0.0580
215	BTR24W14S	3	0	-0.0	4.906	0.098	1.270	-0.37	-0.025	0.0001
215	BTR24W14S	4	0	-0.0	6.906	0.098	1.285	-0.18	0.0499	0.0187
215	BTR24W14S	5	0	0.00	8.872	0.099	1.250	0.114	0.0955	-0.007
215	BTR24W14S	6	0	0.01	10.91	0.099	1.264	0.388	0.1134	-0.090
215	BTR24W14S	7	0	0.02	15.94	0.099	1.262	0.437	0.1044	-0.092
215	BTR24W14S	8	0	0.01	25.92	0.098	1.276	0.401	0.1072	-0.074
216	BTR24W14S	1	0	0.00	25.91	0.049	5.152	-0.16	0.0781	0.1207
216	BTR24W14S	2	0	0.00	15.86	0.049	5.158	-0.47	0.0530	0.1160
216	BTR24W14S	3	0	0.00	10.94	0.050	4.958	-0.66	-0.023	0.1180
216	BTR24W14S	4	0	0.00	8.912	0.048	5.167	-0.58	-0.023	0.0564
216	BTR24W14S	5	0	0.00	6.914	0.048	5.173	-0.68	-0.016	0.1151
216	BTR24W14S	6	0	-0.0	4.905	0.048	5.182	-1.10	-0.022	0.2343
216	BTR24W14S	7	0	-0.0	3.904	0.049	4.977	-1.06	-0.071	0.2488
216	BTR24W14S	8	0	-0.0	3.055	0.049	4.978	-1.41	-0.057	0.4438
217	BTR24W14S	1	94	-0.0	3.055	0.048	5.191	-1.70	-0.104	0.5626
217	BTR24W14S	2	98	-0.0	3.896	0.049	4.998	-1.34	-0.075	0.3814
217	BTR24W14S	3	103.6	-0.0	4.900	0.049	4.993	-1.04	-0.087	0.2814
217	BTR24W14S	4	103.6	0.00	6.928	0.049	4.994	-0.78	-0.054	0.1534
217	BTR24W14S	5	102	0.00	8.942	0.049	4.999	-0.75	-0.027	0.1524
217	BTR24W14S	6	100.4	0.00	10.93	0.047	5.556	-0.83	0.0224	0.2461
217	BTR24W14S	7	99.60	0.00	15.86	0.047	5.556	-0.14	0.0933	0.1603
217	BTR24W14S	8	99.19	0.00	25.87	0.048	5.326	-0.15	0.0726	0.1232

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
218	BTR24W14S	1	100	0.01	25.88	0.099	1.262	0.379	0.1094	-0.070
218	BTR24W14S	2	100.8	0.01	15.96	0.100	1.236	0.433	0.1106	-0.086
218	BTR24W14S	3	100.8	0.02	10.96	0.100	1.227	0.573	0.1071	-0.132
218	BTR24W14S	4	100.8	0.02	8.915	0.099	1.252	0.396	0.0960	-0.039
218	BTR24W14S	5	100.8	0.01	6.914	0.099	1.251	0.054	0.0854	0.0963
218	BTR24W14S	6	100.8	-0.0	4.875	0.099	1.241	-0.31	0.0493	0.0881
218	BTR24W14S	7	100.4	-0.0	3.878	0.099	1.252	-0.44	-0.014	0.1199
218	BTR24W14S	8	100.4	-0.0	3.055	0.100	1.232	0.48	-0.070	0.1847
219	BTR24W14S	1	102.8	-0.0	3.036	73.88	0.000	0.222	0.0525	-0.147
219	BTR24W14S	2	101.6	-0.0	3.927	62.46	0.000	0.233	0.0498	-0.146
219	BTR24W14S	3	100.8	-0.0	4.892	82.17	0.000	0.223	0.0514	-0.147
219	BTR24W14S	4	99.60	-0.0	6.882	56.96	0.000	0.221	0.0523	-0.146
219	BTR24W14S	5	98.79	-0.0	8.883	56.89	0.000	0.229	0.0489	-0.147
219	BTR24W14S	6	98.79	-0.0	10.89	37.82	0.000	0.234	0.0475	-0.144
219	BTR24W14S	7	98	-0.0	15.85	147.4	0.000	0.216	0.0528	-0.141
219	BTR24W14S	8	97.19	-0.0	21.46	68.48	0.000	0.225	0.0498	-0.143
220	BR24W14S	10	0	2.07	43.22	182.1	0.000	0.521	0.0582	-0.183
220	BR24W14S	11	0	4.02	36.48	322.6	0.000	0.443	0.0630	-0.218
220	BR24W14S	12	0	6.04	36.23	6.333	0.000	0.548	0.0753	-0.242
220	BR24W14S	13	0	8.01	36.36	169.5	0.000	0.671	0.0947	-0.274
220	BR24W14S	14	0	10.0	35.80	176.0	0.000	0.796	0.1409	-0.319
220	BR24W14S	15	0	11.6	35.89	4.161	0.000	0.845	0.1862	-0.343
222	BR24W14S	1	0	0.00	36.84	0.099	1.240	0.197	0.0873	-0.059
222	BR24W14S	2	0	2.01	36.55	0.099	1.248	0.326	0.0878	-0.097
222	BR24W14S	3	0	4.00	36.05	0.099	1.263	0.435	0.0916	-0.127
222	BR24W14S	4	0	6.02	36.44	0.099	1.250	0.544	0.0981	-0.156
222	BR24W14S	5	0	8.05	36.34	0.099	1.243	0.656	0.1160	-0.184
222	BR24W14S	6	0	10.0	36.33	0.100	1.235	0.778	0.1594	-0.220
222	BR24W14S	7	0	11.6	36.65	0.099	1.257	0.829	0.2035	-0.256
223	BR24W14S	1	0	0.00	2.016	0.099	1.258	-0.49	-0.001	0.2916
223	BR24W14S	2	0	0.01	3.029	0.098	1.288	-0.29	0.0898	0.2749
223	BR24W14S	3	0	0.03	4.040	0.098	1.277	0.107	0.0878	0.0847
223	BR24W14S	4	0	0.03	6.047	0.098	1.275	0.312	0.0894	-0.051
223	BR24W14S	5	0	0.03	8.042	0.098	1.279	0.310	0.0974	-0.088
223	BR24W14S	6	0	0.03	10.07	0.098	1.278	0.269	0.0908	-0.090
223	BR24W14S	7	0	0.03	15.07	0.098	1.275	0.232	0.0828	-0.070
223	BR24W14S	8	0	0.02	25.04	0.098	1.282	0.198	0.0883	-0.063
224	BR24W14S	1	0	0.02	25.03	0.049	5.158	-0.02	0.0959	-0.011
224	BR24W14S	2	0	0.02	15.11	0.050	4.959	-0.10	0.1022	0.0500
224	BR24W14S	3	0	0.02	10.11	0.049	5.146	-0.43	0.0991	0.2271
224	BR24W14S	4	0	0.02	8.037	0.050	4.950	-0.68	0.0878	0.3550
224	BR24W14S	5	0	0.01	6.024	0.048	5.168	-0.98	0.1130	0.4027
224	BR24W14S	6	0	0.01	4.022	0.047	5.384	-1.26	0.0463	0.4344
224	BR24W14S	7	0	0.01	3.030	0.049	5.147	-1.58	0.0420	0.7706
224	BR24W14S	8	0	0.00	2.004	0.049	5.164	-1.92	0.0516	0.9288



RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
225	BR24W14S	1	0	-0.0	1.993	0.535	0.043	0.203	0.0530	-0.146
225	BR24W14S	2	0	-0.0	3.008	0.543	0.042	0.206	0.0529	-0.152
225	BR24W14S	3	0	-0.0	4.001	0.558	0.039	0.212	0.0539	-0.154
225	BR24W14S	4	0	-0.0	5.994	0.554	0.040	0.212	0.0564	-0.152
225	BR24W14S	5	0	-0.0	8.007	0.515	0.046	0.200	0.0569	-0.154
225	BR24W14S	6	0	-0.0	9.999	0.594	0.035	0.224	0.0501	-0.152
225	BR24W14S	7	0	-0.0	15.00	0.560	0.039	0.209	0.0554	-0.152
225	BR24W14S	8	0	-0.0	25.07	0.548	0.041	0.212	0.0519	-0.155
226	BR24W14S	1	98.79	-0.0	25.07	0.556	0.040	0.208	0.0561	-0.152
226	BR24W14S	2	100	-0.0	15.05	0.582	0.036	0.206	0.0524	-0.151
226	BR24W14S	3	99.19	-0.0	9.989	0.544	0.041	0.206	0.0570	-0.151
226	BR24W14S	4	99.19	-0.0	7.993	0.551	0.040	0.207	0.0541	-0.154
226	BR24W14S	5	99.19	-0.0	6.001	0.568	0.038	0.205	0.0536	-0.154
226	BR24W14S	6	99.60	-0.0	4.021	0.566	0.038	0.206	0.0516	-0.156
226	BR24W14S	7	100	-0.0	3.009	0.565	0.038	0.204	0.0529	-0.156
226	BR24W14S	8	98	-0.0	2.013	0.575	0.037	0.194	0.0511	-0.152
227	BR24W14S	1	47.59	0.00	2.020	0.050	4.847	-1.86	0.0266	0.8656
227	BR24W14S	2	45.59	0.01	3.026	0.049	5.039	-1.50	0.0062	0.6596
227	BR24W14S	3	46.39	0.01	4.039	0.048	5.254	-1.15	0.1185	0.4676
227	BR24W14S	4	48	0.01	6.027	0.048	5.263	-0.92	0.1366	0.5794
227	BR24W14S	5	50.8	0.02	8.033	0.049	5.063	-0.45	0.1313	0.3675
227	BR24W14S	6	48.39	0.02	10.03	0.050	4.857	-0.19	0.1020	0.1705
227	BR24W14S	7	44.8	0.02	15.04	0.049	5.087	-0.04	0.1100	0.0123
227	BR24W14S	8	50.39	0.02	25.02	0.049	5.088	-0.02	0.0965	-0.021
228	BR24W14S	1	98.39	0.02	25.03	0.101	1.214	0.191	0.0873	-0.061
228	BR24W14S	2	100	0.02	15.12	0.100	1.217	0.210	0.0848	-0.070
228	BR24W14S	3	100	0.03	10.13	0.100	1.226	0.262	0.0823	-0.082
228	BR24W14S	4	100	0.03	8.059	0.100	1.229	0.309	0.0881	-0.097
228	BR24W14S	5	98.79	0.03	6.045	0.100	1.235	0.400	0.0946	-0.114
228	BR24W14S	6	98.39	0.04	4.058	0.099	1.248	0.379	0.0676	-0.021
228	BR24W14S	7	98	0.03	3.065	0.100	1.235	0.283	0.0741	0.0201
228	BR24W14S	8	97.19	0.01	2.028	0.100	1.237	-0.28	0.0815	0.3643
229	BR24W10S	14	0	0.00	30.34	0.596	0.034	0.231	0.0457	-0.047
229	BR24W10S	15	0	2.03	36.50	0.586	0.036	0.336	0.0503	-0.019
229	BR24W10S	16	0	4.04	42.63	0.677	0.027	0.469	0.0517	0.0089
229	BR24W10S	17	0	6.02	48.74	0.639	0.030	0.577	0.0672	0.0342
229	BR24W10S	18	0	7.98	54.83	0.580	0.036	0.666	0.0830	0.0521
229	BR24W10S	19	0	9.96	53.02	0.594	0.035	0.779	0.1254	0.0677
229	BR24W10S	20	0	11.6	48.23	0.574	0.037	0.861	0.1729	0.0692
230	BR24W10S	1	0	-0.0	36.85	0.103	1.161	0.199	0.0796	0.0796
230	BR24W10S	2	0	2.03	43.00	0.103	1.149	0.314	0.0767	0.1025
230	BR24W10S	3	0	3.99	48.99	0.103	1.167	0.421	0.0816	0.1360
230	BR24W10S	4	0	5.97	55.03	0.103	1.166	0.526	0.0855	0.1616
230	BR24W10S	5	0	7.98	61.23	0.103	1.157	0.624	0.0989	0.1821
230	BR24W10S	6	0	10.0	54.84	0.103	1.156	0.769	0.1366	0.2046
230	BR24W10S	7	0	11.7	60.13	0.102	1.173	0.824	0.1840	0.2139

RU RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
231	BR24W10S	2	0	0.01	2.026	0.049	5.107	-1.22	0.0799	0.4924
231	BR24W10S	3	0	0.00	3.025	0.049	5.123	-1.24	0.0168	0.1469
231	BR24W10S	4	0	0.01	4.024	0.049	5.121	-0.88	0.0262	0.0874
231	BR24W10S	5	0	0.01	6.046	0.049	5.137	-0.67	0.1309	0.1014
231	BR24W10S	6	0	0.02	8.039	0.048	5.343	-0.38	0.1058	0.1207
231	BR24W10S	7	0	0.02	10.05	0.049	5.153	-0.13	0.1126	0.0882
231	BR24W10S	8	0	0.02	15.11	0.048	5.165	0.019	0.1028	0.0322
231	BR24W10S	9	0	0.02	25.02	0.048	5.186	0.042	0.0925	0.0012
232	BR24W10S	1	0	0.03	25.02	0.100	1.227	0.201	0.0793	0.0668
232	BR24W10S	2	0	0.03	15.10	0.099	1.240	0.217	0.0768	0.0695
232	BR24W10S	3	0	0.04	10.07	0.101	1.215	0.268	0.0769	0.0815
232	BR24W10S	4	0	0.04	8.059	0.100	1.233	0.327	0.0880	0.1011
232	BR24W10S	5	0	0.05	6.062	0.100	1.237	0.455	0.0755	0.1315
232	BR24W10S	6	0	0.05	4.066	0.100	1.231	0.517	0.0474	0.2043
232	BR24W10S	7	0	0.01	3.030	0.100	1.229	-0.23	0.0460	0.1750
232	BR24W10S	8	0	0.01	2.025	0.099	1.254	-0.43	-0.012	0.2022
233	BR24W10S	1	0	-0.0	1.986	0.476	0.054	0.226	0.0547	-0.043
233	BR24W10S	2	0	-0.0	3.003	0.589	0.035	0.222	0.0471	-0.051
233	BR24W10S	3	0	-0.0	4.006	0.605	0.033	0.235	0.0411	-0.055
233	BR24W10S	4	0	-0.0	6.002	0.574	0.037	0.218	0.0454	-0.054
233	BR24W10S	5	0	-0.0	7.999	0.540	0.042	0.213	0.0494	-0.054
233	BR24W10S	6	0	-0.0	10.01	0.611	0.033	0.221	0.0434	-0.055
233	BR24W10S	7	0	-0.0	14.99	0.552	0.040	0.210	0.0481	-0.053
233	BR24W10S	8	20.8	-0.0	25.00	0.567	0.038	0.222	0.0448	-0.053
234	BR24W10S	1	96	-0.0	25.01	0.617	0.032	0.217	0.0413	-0.053
234	BR24W10S	2	97.60	-0.0	15.05	0.552	0.040	0.204	0.0446	-0.058
234	BR24W10S	3	97.19	-0.0	9.999	0.579	0.036	0.215	0.0456	-0.053
234	BR24W10S	4	97.19	-0.0	7.997	0.568	0.038	0.198	0.0468	-0.057
234	BR24W10S	5	96.79	-0.0	6.025	0.648	0.029	0.217	0.0410	-0.055
234	BR24W10S	6	96.79	-0.0	3.998	0.524	0.045	0.198	0.0492	-0.055
234	BR24W10S	7	96.79	-0.0	3.018	0.566	0.038	0.213	0.0434	-0.054
234	BR24W10S	8	96.79	-0.0	2.005	0.584	0.036	0.216	0.0421	-0.050
235	BR24W10S	1	94.79	0.01	2.037	0.100	1.234	-0.30	0.0181	0.1827
235	BR24W10S	2	96	0.06	3.063	0.100	1.239	0.585	0.0257	0.2769
235	BR24W10S	3	98.79	0.06	4.069	0.100	1.240	0.632	0.0455	0.1904
235	BR24W10S	4	98	0.04	6.052	0.099	1.256	0.406	0.0818	0.1172
235	BR24W10S	5	94.39	0.04	8.068	0.100	1.235	0.286	0.0652	0.0814
235	BR24W10S	6	95.19	0.03	10.05	0.099	1.259	0.233	0.0724	0.0706
235	BR24W10S	7	101.2	0.03	15.04	0.099	1.262	0.211	0.0707	0.0648
235	BR24W10S	8	98.79	0.03	25.06	0.099	1.250	0.218	0.0643	0.0647
236	BR24W10S	1	47.2	0.02	25.03	0.049	5.145	0.055	0.0799	0.0002
236	BR24W10S	2	45.2	0.01	15.04	0.049	4.969	0.074	0.1078	0.0528
236	BR24W10S	3	46	0.01	10.03	0.048	5.192	0.060	0.1250	0.1483
236	BR24W10S	4	57.59	0.02	8.009	0.048	5.197	0.024	0.1206	0.2616
236	BR24W10S	5	60	0.02	6.024	0.048	5.168	-0.09	0.0902	0.3418
236	BR24W10S	6	42.8	0.00	4.021	0.048	5.193	-0.93	0.0739	0.1074
236	BR24W10S	7	51.2	0.00	3.019	0.049	4.998	-1.02	-0.019	0.1004
236	BR24W10S	8	44	0.00	2.010	0.049	5.004	-1.04	0.0613	0.3607

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
237	BR24W18S	9	0	0.02	37.03	0.651	0.029	0.222	0.0479	-0.258
237	BR24W18S	10	0	2.05	43.21	0.608	0.033	0.324	0.0540	-0.339
237	BR24W18S	11	0	3.99	49.15	0.607	0.033	0.425	0.0630	-0.418
237	BR24W18S	12	0	5.99	55.34	0.629	0.031	0.535	0.0773	-0.497
237	BR24W18S	13	0	8.02	61.54	0.643	0.029	0.635	0.0985	-0.576
237	BR24W18S	14	0	10.0	67.70	0.659	0.028	0.753	0.1455	-0.677
237	BR24W18S	15	0	11.5	72.62	0.602	0.034	0.821	0.1877	-0.742
238	BR24W18S	1	0	0.04	37.00	0.101	1.207	0.022	0.0736	0.0052
238	BR24W18S	2	0	2.02	43.03	0.101	1.210	0.123	0.0759	-0.093
238	BR24W18S	3	0	4.02	49.12	0.101	1.202	0.236	0.0782	-0.179
238	BR24W18S	4	0	6.01	55.29	0.101	1.199	0.357	0.0812	-0.261
238	BR24W18S	5	0	7.99	61.36	0.100	1.217	0.453	0.0968	-0.347
238	BR24W18S	6	0	10.0	67.65	0.101	1.195	0.561	0.1206	-0.433
238	BR24W18S	7	0	11.6	72.68	0.100	1.219	0.648	0.1687	-0.516
239	BR24W18S	1	0	-0.0	2.031	0.101	1.200	-0.50	0.0230	0.2910
239	BR24W18S	2	0	-0.0	3.025	0.101	1.205	-0.34	0.1082	0.3401
239	BR24W18S	3	2.8	-0.0	4.046	0.101	1.215	-0.18	0.0894	0.2193
239	BR24W18S	4	0	0.00	6.057	0.100	1.216	0.073	0.0933	0.0045
239	BR24W18S	5	0	0.00	8.059	0.100	1.217	0.096	0.0826	-0.056
239	BR24W18S	6	0	0.00	10.05	0.100	1.221	0.084	0.0792	-0.065
239	BR24W18S	7	0	0.00	15.06	0.100	1.222	0.052	0.0682	-0.025
239	BR24W18S	8	0	-0.0	25.04	0.100	1.226	0.017	0.0721	-0.007
240	BR24W18S	1	0	-0.0	25.00	0.710	0.024	0.219	0.0464	-0.263
240	BR24W18S	2	0	-0.0	15.02	0.795	0.019	0.217	0.0432	-0.261
240	BR24W18S	3	0	-0.0	10.01	0.726	0.023	0.216	0.0440	-0.267
240	BR24W18S	4	0	-0.0	8.035	0.830	0.017	0.229	0.0420	-0.266
240	BR24W18S	5	0	-0.0	6.023	0.828	0.018	0.231	0.0411	-0.267
240	BR24W18S	6	0	-0.0	4.025	0.678	0.026	0.221	0.0457	-0.266
240	BR24W18S	7	0	-0.0	3.030	0.725	0.023	0.220	0.0439	-0.266
240	BR24W18S	8	0	-0.0	2.016	0.701	0.025	0.200	0.0429	-0.248
241	BR24W18S	2	0	0.03	2.021	0.050	4.924	-2.47	2.0003	3.6175
241	BR24W18S	3	0	0.03	3.009	0.050	4.769	-1.78	2.0671	2.8419
241	BR24W18S	4	0	0.03	4.028	0.051	4.764	-1.20	2.1431	2.6055
241	BR24W18S	5	0	0.04	4.034	0.051	4.761	-1.22	2.2690	2.7269
241	BR24W18S	6	0	0.04	6.022	0.050	4.954	-1.02	2.4812	2.9172
241	BR24W18S	7	0	0.04	8.028	0.049	4.966	-0.86	2.6509	3.0504
241	BR24W18S	8	0	0.04	10.03	0.049	4.980	-0.67	2.7439	2.8944
241	BR24W18S	9	0	0.04	15.02	0.049	4.987	-0.31	2.8237	2.6161
241	BR24W18S	10	0	0.04	25.03	0.049	4.983	-0.14	2.9900	2.6414
242	BR24W18S	1	50.39	0.04	25.02	0.049	5.045	-0.17	3.9463	3.4592
242	BR24W18S	2	49.59	0.04	15.04	0.050	4.852	-0.24	4.0992	3.6786
242	BR24W18S	3	48.39	0.04	10.02	0.049	5.048	-0.53	4.4425	4.3362
242	BR24W18S	4	51.59	0.04	8.035	0.049	5.036	-0.81	4.5270	4.7477
242	BR24W18S	5	50.8	0.03	6.021	0.049	5.073	-0.98	4.5409	4.7673
242	BR24W18S	6	51.59	0.03	4.029	0.050	4.873	-1.33	4.3630	4.6158
242	BR24W18S	7	51.59	0.03	3.023	0.049	5.071	-1.66	4.5390	4.8973
242	BR24W18S	8	50.39	0.02	2.010	0.049	5.075	-2.60	4.5839	5.8664

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
243	BR24W18S	1	51.2	0.03	2.016	0.098	1.280	-0.47	1.1481	1.3168
243	BR24W18S	2	50.8	0.04	3.027	0.098	1.266	-0.23	1.1550	1.1830
243	BR24W18S	3	50.39	0.04	4.015	0.098	1.272	-0.13	1.1518	1.1517
243	BR24W18S	4	50	0.05	6.033	0.099	1.256	0.099	1.1001	0.8515
243	BR24W18S	5	49.59	0.04	8.031	0.098	1.272	0.096	1.0788	0.7912
243	BR24W18S	6	49.2	0.04	10.04	0.098	1.271	0.083	1.0674	0.8073
243	BR24W18S	7	51.59	0.04	15.05	0.099	1.258	0.055	1.0246	0.8042
243	BR24W18S	8	48	0.04	25.02	0.099	1.262	0.019	0.9876	0.7920
244	BR24W18S	1	46	-0.0	24.98	0.690	0.026	0.203	0.9496	0.5362
244	BR24W18S	2	49.2	-0.0	15.02	0.743	0.022	0.204	0.9507	0.5351
244	BR24W18S	3	51.59	0.00	9.997	0.788	0.019	0.205	0.9391	0.5225
244	BR24W18S	4	51.2	0.00	7.997	0.874	0.016	0.211	0.9078	0.5014
244	BR24W18S	5	50.39	0.00	5.997	0.790	0.019	0.209	0.8781	0.4676
244	BR24W18S	6	50	0.00	4.007	0.726	0.023	0.213	0.8003	0.3982
244	BR24W18S	7	49.2	0.00	3.006	0.810	0.018	0.206	0.7947	0.3957
244	BR24W18S	8	50.8	0.00	1.996	0.794	0.019	0.197	0.7577	0.3696
245	BR24	9	0	0.00	36.96	0.633	0.030	0.031	0.0333	-0.022
245	BR24	10	0	1.95	42.89	0.666	0.027	0.047	0.0357	-0.005
245	BR24	11	0	4.00	49.11	0.619	0.032	0.063	0.0378	0.0072
245	BR24	12	0	6.01	55.28	0.630	0.031	0.067	0.0416	0.0215
245	BR24	13	0	7.98	61.36	0.600	0.034	0.078	0.0478	0.0327
245	BR24	14	0	10.0	67.67	0.690	0.026	0.108	0.0548	0.0539
245	BR24	15	0	11.6	72.62	0.705	0.024	0.127	0.0605	0.0637
246	BR24	1	0	0.00	36.82	0.100	1.229	-0.03	0.0613	0.1007
246	BR24	2	0	2.01	42.93	0.099	1.242	-0.03	0.0642	0.1175
246	BR24	3	0	3.98	48.96	0.100	1.231	-0.03	0.0559	0.1377
246	BR24	4	0	6.00	55.12	0.100	1.228	-0.01	0.0475	0.1573
246	BR24	5	0	7.99	61.28	0.100	1.232	-0.01	0.0508	0.1726
246	BR24	6	0	10.0	67.63	0.100	1.229	0.009	0.0517	0.1898
246	BR24	7	0	11.6	72.63	0.099	1.248	0.005	0.0577	0.2057
247	BR24	1	0	-0.0	2.043	0.099	1.240	-0.41	-0.018	0.2190
247	BR24	2	0	-0.0	3.038	0.099	1.244	-0.24	0.0751	0.2280
247	BR24	3	0	0.00	4.051	0.099	1.243	-0.10	0.0894	0.2253
247	BR24	4	0	0.00	6.056	0.099	1.248	-0.04	0.0872	0.1798
247	BR24	5	0	0.00	8.064	0.099	1.240	-0.03	0.0765	0.1356
247	BR24	6	0	0.00	10.10	0.099	1.247	-0.04	0.0733	0.1154
247	BR24	7	0	0.00	15.05	0.099	1.259	-0.03	0.0622	0.1026
247	BR24	8	0	0.00	25.04	0.099	1.250	-0.04	0.0655	0.1004
248	BR24	1	0	0.00	25.05	0.049	5.071	-0.03	0.0418	0.0762
248	BR24	2	0	0.00	15.05	0.050	4.898	-0.08	0.0600	0.0944
248	BR24	3	0	0.00	10.11	0.050	4.893	-0.16	0.0723	0.1380
248	BR24	4	0	0.01	8.068	0.049	5.073	-0.20	0.0504	0.1375
248	BR24	5	0	0.00	6.048	0.050	4.901	-0.30	0.0795	0.0951
248	BR24	6	0	0.00	4.056	0.049	5.109	-0.39	0.0039	-0.021
248	BR24	7	0	0.00	3.049	0.050	4.916	-0.54	0.0268	0.1109
248	BR24	8	0	-0.0	2.041	0.049	5.113	-1.16	0.0676	0.5268

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
249	BR24	1	0	-0.0	2.006	0.648	0.029	0.024	0.0391	-0.016
249	BR24	2	0	-0.0	3.015	0.734	0.022	0.033	0.0353	-0.016
249	BR24	3	0	-0.0	4.018	0.752	0.021	0.037	0.0336	-0.017
249	BR24	4	0	-0.0	6.006	0.745	0.022	0.030	0.0376	-0.017
249	BR24	5	0	-0.0	8.009	0.663	0.028	0.032	0.0383	-0.018
249	BR24	6	0	-0.0	9.987	0.649	0.029	0.026	0.0402	-0.017
249	BR24	7	0	-0.0	15.00	0.698	0.025	0.032	0.0363	-0.020
249	BR24	8	0	-0.0	24.98	0.744	0.022	0.031	0.0349	-0.019
250	BR24	1	102.4	-0.0	24.98	0.749	0.022	0.041	0.0336	-0.019
250	BR24	2	100.4	-0.0	15.06	0.736	0.022	0.035	0.0377	-0.019
250	BR24	3	100.4	-0.0	10.02	0.666	0.027	0.025	0.0394	-0.022
250	BR24	4	98.39	-0.0	8.005	0.751	0.021	0.031	0.0365	-0.020
250	BR24	5	99.19	-0.0	6.002	0.699	0.025	0.029	0.0373	-0.024
250	BR24	6	99.60	-0.0	4.007	0.800	0.019	0.038	0.0355	-0.021
250	BR24	7	99.19	-0.0	3.017	0.810	0.018	0.035	0.0323	-0.022
250	BR24	8	99.60	-0.0	2.005	0.651	0.029	0.021	0.0392	-0.022
251	BR24	1	99.60	0.00	2.044	0.101	1.206	-0.25	0.0427	0.1991
251	BR24	2	100.4	0.00	3.044	0.101	1.206	-0.13	0.0928	0.2720
251	BR24	3	100	0.01	4.056	0.101	1.209	-0.06	0.0833	0.2304
251	BR24	4	100.4	0.00	6.069	0.101	1.195	-0.02	0.0826	0.1471
251	BR24	5	100	0.00	8.048	0.101	1.212	-0.03	0.0743	0.1164
251	BR24	6	100.4	0.00	10.05	0.101	1.201	-0.04	0.0687	0.1099
251	BR24	7	98.79	0.00	15.06	0.101	1.208	-0.02	0.0576	0.1043
251	BR24	8	99.60	0.00	25.00	0.101	1.203	-0.04	0.0649	0.1036
252	BR24	1	50	0.00	25.01	0.050	4.887	-0.03	0.0505	0.0804
252	BR24	2	50.39	0.00	15.08	0.050	4.891	-0.08	0.0739	0.1094
252	BR24	3	52	0.00	10.07	0.050	4.885	-0.12	0.0852	0.2048
252	BR24	4	48.39	0.00	8.054	0.050	4.882	-0.16	0.0988	0.2685
252	BR24	5	50.39	0.00	6.059	0.050	4.878	-0.23	0.1128	0.3063
252	BR24	6	51.59	0.00	4.056	0.050	4.889	-0.41	0.0781	0.1287
252	BR24	7	51.2	0.00	3.056	0.050	4.894	-0.60	-0.012	0.1008
252	BR24	8	50.8	-0.0	2.042	0.050	4.900	-0.97	0.0519	0.3984
253	BR24W10	2	0	0.04	2.025	0.100	1.218	-0.46	-0.013	0.1898
253	BR24W10	3	0	0.08	3.059	0.100	1.218	0.079	0.0443	0.3209
253	BR24W10	4	0	0.12	4.074	0.100	1.232	0.635	0.0365	0.5510
253	BR24W10	5	0	0.10	6.069	0.100	1.232	0.481	0.0678	0.4024
253	BR24W10	6	0	0.09	8.059	0.100	1.233	0.344	0.0792	0.3024
253	BR24W10	7	0	0.08	10.06	0.100	1.237	0.277	0.0785	0.2563
253	BR24W10	8	0	0.08	15.05	0.100	1.237	0.256	0.0706	0.2226
253	BR24W10	9	0	0.08	25.01	0.100	1.239	0.245	0.0708	0.2133
255	BR24W10F	2	0	0.01	33.31	0.637	0.030	0.665	0.1390	0.2423
255	BR24W10F	3	0	2.08	39.60	0.719	0.023	0.777	0.1454	0.3265
255	BR24W10F	4	0	4.05	45.62	0.733	0.023	0.879	0.1601	0.4032
255	BR24W10F	5	0	6.02	51.63	0.766	0.021	0.986	0.1808	0.4828
255	BR24W10F	6	0	8.05	57.91	0.662	0.028	1.085	0.2271	0.5602
255	BR24W10F	7	0	10.0	64.16	0.749	0.022	1.124	0.3018	0.5623
255	BR24W10F	8	0	11.7	69.23	0.664	0.028	0.989	0.3360	0.5093

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
256	BR24W10F	1	0	0.05	33.36	0.100	1.225	0.668	0.1722	0.3986
256	BR24W10F	2	0	2.03	39.35	0.102	1.190	0.751	0.1870	0.4815
256	BR24W10F	3	0	4.02	45.43	0.101	1.199	0.860	0.1958	0.5643
256	BR24W10F	4	0	6.00	51.49	0.101	1.196	0.967	0.2089	0.6393
256	BR24W10F	5	0	8.00	57.64	0.101	1.203	1.076	0.2549	0.7248
256	BR24W10F	6	0	10.0	63.88	0.101	1.203	1.138	0.3343	0.7391
256	BR24W10F	7	0	11.7	69.30	0.101	1.213	1.082	0.3757	0.6962
257	BR24W10F	1	0	-0.0	3.043	0.103	1.154	0.043	0.1177	0.2997
257	BR24W10F	2	0	0.03	4.094	0.103	1.166	1.008	0.1483	0.6794
257	BR24W10F	3	0	0.02	6.082	0.103	1.159	0.852	0.1702	0.5472
257	BR24W10F	4	0	0.01	8.087	0.102	1.170	0.734	0.1750	0.4741
257	BR24W10F	5	0	0.00	10.12	0.102	1.173	0.693	0.1743	0.4340
257	BR24W10F	6	0	0.00	15.08	0.100	1.230	0.669	0.1744	0.4000
257	BR24W10F	7	0	0.00	25.07	0.100	1.216	0.666	0.1728	0.4028
258	BR24W10F	1	0	-0.0	25.05	0.047	5.383	0.614	0.1686	0.3541
258	BR24W10F	2	0	-0.0	15.10	0.050	4.772	0.698	0.1883	0.4581
258	BR24W10F	3	0	-0.0	10.06	0.050	4.773	0.829	0.1977	0.5676
258	BR24W10F	4	0	-0.0	8.059	0.050	4.784	0.661	0.1992	0.5017
258	BR24W10F	5	0	-0.0	6.065	0.049	4.980	0.009	0.1364	0.1532
258	BR24W10F	6	0	-0.0	4.054	0.049	4.968	-0.45	-0.046	-0.022
258	BR24W10F	7	0	-0.0	3.046	0.050	4.807	-0.67	0.0238	0.0881
259	BR24W10F	1	0	-0.0	3.039	0.624	0.031	0.663	0.1285	0.2625
259	BR24W10F	2	0	-0.0	4.034	0.625	0.031	0.692	0.1355	0.2698
259	BR24W10F	3	0	-0.0	6.036	0.646	0.029	0.693	0.1376	0.2683
259	BR24W10F	4	0	-0.0	8.036	0.668	0.027	0.681	0.1374	0.2614
259	BR24W10F	5	0	-0.0	10.06	0.631	0.031	0.671	0.1427	0.2579
259	BR24W10F	6	0	-0.0	15.03	0.749	0.022	0.674	0.1382	0.2518
259	BR24W10F	7	0	-0.0	24.98	0.685	0.026	0.664	0.1393	0.2487
260	BR24W10F	1	97.60	-0.0	24.97	0.661	0.028	0.658	0.1456	0.2470
260	BR24W10F	2	94	-0.0	15.06	0.758	0.021	0.667	0.1387	0.2470
260	BR24W10F	3	99.19	-0.0	10.05	0.708	0.024	0.683	0.1372	0.2558
260	BR24W10F	4	100.4	-0.0	8.019	0.651	0.029	0.672	0.1423	0.2549
260	BR24W10F	5	99.60	-0.0	6.022	0.672	0.027	0.698	0.1391	0.2689
260	BR24W10F	6	99.60	-0.0	4.035	0.678	0.026	0.714	0.1371	0.2816
260	BR24W10F	7	100.4	-0.0	3.032	0.639	0.030	0.741	0.1320	0.2980
261	BR24W10F	4	100	0.02	3.108	0.100	1.237	0.842	0.1461	0.7409
261	BR24W10F	5	100	0.02	4.107	0.099	1.251	0.881	0.1732	0.6805
261	BR24W10F	6	100	0.00	6.103	0.100	1.238	0.725	0.1966	0.5142
261	BR24W10F	7	100.4	-0.0	8.099	0.100	1.238	0.646	0.1940	0.4472
261	BR24W10F	8	101.6	-0.0	10.10	0.099	1.249	0.634	0.1908	0.4284
261	BR24W10F	9	99.60	-0.0	15.08	0.099	1.254	0.615	0.1948	0.4101
261	BR24W10F	10	100	-0.0	25.08	0.099	1.251	0.627	0.1908	0.4026
262	BR24W10F	3	49.59	0.02	25.03	0.050	4.827	0.603	0.1550	0.3226
262	BR24W10F	4	49.2	0.03	15.09	0.050	4.805	0.735	0.1574	0.4296
262	BR24W10F	5	48	0.03	10.10	0.050	4.838	0.940	0.1955	0.6335
262	BR24W10F	6	51.2	0.04	8.075	0.050	4.827	1.224	0.1829	0.8426
262	BR24W10F	7	47.59	0.03	6.066	0.050	4.836	0.847	0.1559	0.7148
262	BR24W10F	8	51.2	0.01	4.060	0.050	4.833	-0.28	0.0073	0.1124
262	BR24W10F	9	50.8	0.01	3.039	0.049	5.028	-0.49	-0.020	0.1526

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
263	BR24W10F	10	0	0.00	36.87	0.548	0.041	0.652	0.1514	-0.103
263	BR24W10F	11	0	2.02	43.00	0.576	0.037	0.762	0.1659	-0.079
263	BR24W10F	12	0	4.06	37.42	0.628	0.031	0.878	0.1797	-0.046
263	BR24W10F	13	0	6.00	34.05	0.671	0.027	0.998	0.2000	-0.021
263	BR24W10F	14	0	8.01	36.39	0.603	0.034	1.137	0.2605	-0.007
263	BR24W10F	15	0	10.0	37.47	0.601	0.034	1.112	0.3309	-0.013
263	BR24W10F	16	0	11.6	37.31	0.586	0.036	0.976	0.3582	-0.002
264	BR24W14F	1	0	-0.0	31.26	0.100	1.235	0.706	0.1943	0.0045
264	BR24W14F	2	0	2.00	36.43	0.099	1.250	0.813	0.2080	0.0361
264	BR24W14F	3	0	4.09	37.26	0.100	1.232	0.930	0.2181	0.0680
264	BR24W14F	4	0	6.04	35.54	0.099	1.252	1.043	0.2524	0.0882
264	BR24W14F	5	0	8.02	35.15	0.099	1.241	1.176	0.3031	0.0979
264	BR24W14F	6	0	10.0	35.73	0.099	1.243	1.236	0.3777	0.0816
264	BR24W14F	7	0	11.7	36.38	0.099	1.245	1.165	0.4190	0.0861
265	BR24W14F	1	0	-0.0	3.047	0.098	1.286	-0.08	0.0981	0.1772
265	BR24W14F	2	0	-0.0	4.065	0.099	1.243	0.546	0.1519	0.1282
265	BR24W14F	3	0	0.00	6.098	0.099	1.262	0.983	0.1907	0.0437
265	BR24W14F	4	0	0.00	8.100	0.098	1.273	0.869	0.2039	0.0399
265	BR24W14F	5	0	-0.0	10.09	0.098	1.280	0.766	0.1996	0.0213
265	BR24W14F	6	0	-0.0	15.12	0.100	1.230	0.720	0.1980	0.0125
265	BR24W14F	7	0	-0.0	25.11	0.101	1.208	0.705	0.1946	0.0114
266	BR24W14F	1	0	-0.0	3.044	0.049	5.119	-1.05	-0.000	0.2160
266	BR24W14F	2	0	-0.0	4.103	0.050	4.918	-0.76	0.0084	0.0580
266	BR24W14F	3	0	-0.0	6.057	0.050	4.927	-0.32	0.1958	-0.011
266	BR24W14F	4	0	-0.0	8.096	0.050	4.909	0.149	0.2165	0.0063
266	BR24W14F	5	0	-0.0	10.13	0.051	4.704	0.529	0.2122	0.0273
266	BR24W14F	6	0	-0.0	15.09	0.051	4.717	0.658	0.2084	0.0138
266	BR24W14F	7	0	-0.0	25.08	0.050	4.926	0.601	0.2046	-0.009
267	BR24W14F	1	0	-0.0	3.034	0.555	0.040	0.654	0.1350	-0.085
267	BR24W14F	2	0	-0.0	4.026	0.558	0.039	0.677	0.1450	-0.090
267	BR24W14F	3	0	-0.0	6.048	0.641	0.030	0.684	0.1451	-0.100
267	BR24W14F	4	0	-0.0	8.067	0.594	0.035	0.668	0.1509	-0.103
267	BR24W14F	5	0	-0.0	10.03	0.610	0.033	0.673	0.1499	-0.103
267	BR24W14F	6	0	-0.0	15.09	0.650	0.029	0.678	0.1498	-0.104
267	BR24W14F	7	0	-0.0	25.04	0.600	0.034	0.662	0.1533	-0.104
268	BR24W14F	1	100	-0.0	3.072	0.614	0.032	0.709	0.1421	-0.096
268	BR24W14F	2	102.4	-0.0	4.060	0.679	0.026	0.715	0.1384	-0.096
268	BR24W14F	3	98.79	-0.0	6.090	0.652	0.029	0.650	0.1421	-0.100
268	BR24W14F	5	94.39	-0.0	8.035	0.586	0.036	0.682	0.1490	-0.100
268	BR24W14F	6	99.60	-0.0	10.06	0.590	0.035	0.663	0.1534	-0.105
268	BR24W14F	7	104.8	-0.0	15.04	0.586	0.036	0.654	0.1530	-0.103
268	BR24W14F	8	96	-0.0	25.04	0.651	0.029	0.679	0.1491	-0.104
269	BR24W14F	2	100.8	0.04	3.084	0.102	1.178	0.771	0.1461	0.1803
269	BR24W14F	3	101.2	0.06	4.122	0.102	1.183	1.158	0.1805	0.0672
269	BR24W14F	4	102	0.03	8.021	0.102	1.178	0.775	0.1916	0.0320
269	BR24W14F	5	101.6	0.03	8.112	0.102	1.182	0.764	0.1921	0.0324
269	BR24W14F	6	102	0.03	10.11	0.103	1.166	0.731	0.1885	0.0239
269	BR24W14F	7	104.8	0.03	15.12	0.102	1.179	0.721	0.1878	0.0148
269	BR24W14F	8	103.6	0.02	25.21	0.102	1.184	0.696	0.1956	0.0129

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
270	BR24W14F	1	50.8	-0.0	3.096	0.050	4.789	-0.76	-0.016	0.2075
270	BR24W14F	2	51.59	-0.0	4.061	0.049	5.025	-0.72	0.0522	0.1867
270	BR24W14F	3	55.59	0.00	6.087	0.051	4.615	0.373	0.1934	0.2022
270	BR24W14F	4	55.59	0.00	8.066	0.052	4.464	0.771	0.2393	0.1058
270	BR24W14F	5	54.8	0.01	10.11	0.053	4.289	0.812	0.2004	0.0689
270	BR24W14F	6	47.59	0.00	15.12	0.052	4.490	0.649	0.2311	0.0086
270	BR24W14F	7	52.8	0.00	25.07	0.051	4.636	0.636	0.1862	-0.016
271	BC24W14S	10	0	0.01	36.96	3.776	0.077	0.215	0.0508	-0.164
271	BC24W14S	11	0	0.02	36.97	0.679	0.026	0.229	0.0444	-0.159
271	BC24W14S	13	0	4.02	39.83	0.586	0.036	0.447	0.0589	-0.224
271	BC24W14S	14	0	6.05	37.33	0.613	0.032	0.576	0.0735	-0.255
271	BC24W14S	15	0	8.07	35.93	0.570	0.038	0.692	0.0949	-0.290
271	BC24W14S	16	0	10.0	35.55	0.583	0.036	0.809	0.1459	-0.336
271	BC24W14S	17	0	11.6	35.90	0.597	0.034	0.866	0.1838	-0.361
272	BC24W14S	1	0	0.03	36.91	0.102	1.179	0.176	0.0671	-0.087
272	BC24W14S	2	0	2.03	34.81	0.102	1.171	0.294	0.0728	-0.126
272	BC24W14S	3	0	4.02	37.03	0.102	1.183	0.422	0.0774	-0.161
272	BC24W14S	4	0	6.00	37.52	0.102	1.188	0.533	0.0904	-0.195
272	BC24W14S	5	0	8.03	36.31	0.102	1.173	0.654	0.1047	-0.225
272	BC24W14S	6	0	10.0	37.42	0.102	1.188	0.768	0.1510	-0.262
272	BC24W14S	7	0	11.7	36.58	0.102	1.174	0.842	0.1931	-0.292
273	BC24W14S	1	0	-0.0	3.080	0.102	1.182	0.293	0.0707	-0.004
273	BC24W14S	2	0	-0.0	4.086	0.102	1.175	0.164	0.0703	0.0416
273	BC24W14S	3	0	-0.0	6.101	0.102	1.185	0.212	0.0725	0.0015
273	BC24W14S	4	0	-0.0	8.087	0.102	1.185	0.275	0.0714	-0.090
273	BC24W14S	5	0	-0.0	10.09	0.102	1.175	0.255	0.0728	-0.108
273	BC24W14S	6	0	-0.0	15.08	0.102	1.186	0.210	0.0669	-0.097
273	BC24W14S	7	0	-0.0	25.07	0.101	1.192	0.169	0.0719	-0.090
274	BC24W14S	1	0	-0.0	3.046	0.050	4.862	-2.25	0.1669	1.5362
274	BC24W14S	2	0	-0.0	4.041	0.050	4.867	-1.51	0.1881	0.9610
274	BC24W14S	3	0	-0.0	6.043	0.050	4.873	-1.11	0.1054	0.5676
274	BC24W14S	4	0	-0.0	8.052	0.050	4.879	-0.78	0.0834	0.3608
274	BC24W14S	5	0	-0.0	10.17	0.050	4.876	-0.52	0.0759	0.2161
274	BC24W14S	6	0	-0.0	15.10	0.050	4.887	-0.16	0.0727	0.0463
274	BC24W14S	7	0	-0.0	25.08	0.050	4.888	0.011	0.0594	-0.027
275	BC24W14S	1	0	-0.1	3.026	0.566	0.038	0.220	0.0435	-0.156
275	BC24W14S	2	0	-0.0	4.026	0.547	0.041	0.223	0.0450	-0.158
275	BC24W14S	3	0	-0.1	6.040	0.546	0.041	0.219	0.0441	-0.159
275	BC24W14S	4	0	-0.1	8.016	0.536	0.043	0.211	0.0484	-0.157
275	BC24W14S	5	0	-0.0	10.03	0.598	0.034	0.227	0.0404	-0.154
275	BC24W14S	6	0	-0.1	15.10	0.580	0.036	0.217	0.0441	-0.152
275	BC24W14S	7	0	-0.1	25.09	0.569	0.038	0.219	0.0427	-0.155
277	BC24W14S	9	100.4	0.03	3.036	0.665	0.028	0.219	0.0414	-0.169
277	BC24W14S	10	100.8	0.03	4.016	0.605	0.033	0.209	0.0476	-0.168
277	BC24W14S	11	101.2	0.03	6.011	0.584	0.036	0.208	0.0504	-0.167
277	BC24W14S	12	101.2	0.03	8.050	0.576	0.037	0.209	0.0468	-0.170
277	BC24W14S	13	101.2	0.03	10.04	0.596	0.034	0.211	0.0490	-0.167
277	BC24W14S	14	98.79	0.03	15.01	0.567	0.038	0.207	0.0489	-0.168
277	BC24W14S	15	99.19	0.02	25.04	0.569	0.038	0.205	0.0485	-0.167



RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
278	BC24W14S	1	99.60	0.10	3.090	0.100	1.236	0.442	0.0467	-0.070
278	BC24W14S	2	98.79	0.05	4.066	0.099	1.241	0.313	0.0586	-0.033
278	BC24W14S	3	98	0.05	6.081	0.099	1.241	0.335	0.0700	-0.091
278	BC24W14S	4	100	0.04	8.120	0.099	1.244	0.290	0.0743	-0.127
278	BC24W14S	5	100.8	0.04	10.08	0.100	1.233	0.226	0.0752	-0.114
278	BC24W14S	6	100.8	0.04	15.09	0.099	1.244	0.182	0.0667	-0.100
278	BC24W14S	7	99.60	0.04	25.13	0.099	1.255	0.176	0.0657	-0.087
279	BC24W14S	1	50	0.03	3.122	0.050	4.811	-0.96	0.0999	1.0000
279	BC24W14S	2	52	0.02	4.042	0.051	4.654	-1.24	0.1242	0.8818
279	BC24W14S	3	48.8	0.02	6.057	0.050	4.836	-0.92	0.1061	0.5476
279	BC24W14S	4	50.8	0.02	8.085	0.049	5.045	-0.64	0.1026	0.3441
279	BC24W14S	5	49.59	0.02	10.09	0.050	4.852	-0.36	0.0945	0.1948
279	BC24W14S	6	50	0.03	15.08	0.050	4.853	-0.05	0.0688	0.0147
279	BC24W14S	7	51.2	0.03	25.07	0.049	5.052	0.004	0.0469	-0.051
280	BC24W10S	9	0	0.04	37.06	0.784	0.020	0.217	0.0448	-0.050
280	BC24W10S	10	0	2.05	43.17	1.096	0.010	0.361	0.0379	-0.020
280	BC24W10S	11	0	4.08	49.34	0.916	0.014	0.466	0.0512	0.0065
280	BC24W10S	12	0	6.04	55.29	1.211	0.008	0.569	0.0586	0.0292
280	BC24W10S	13	0	8.01	39.94	0.841	0.017	0.695	0.0845	0.0604
280	BC24W10S	14	0	10.0	37.28	0.801	0.019	0.821	0.1368	0.0698
280	BC24W10S	15	0	11.6	37.20	0.895	0.015	0.893	0.1755	0.0747
281	BC24W10S	1	0	0.06	37.00	0.103	1.147	0.219	0.0605	0.0211
281	BC24W10S	2	2.4	2.05	43.05	0.103	1.147	0.331	0.0626	0.0505
281	BC24W10S	3	0	4.03	37.33	0.103	1.161	0.451	0.0716	0.0819
281	BC24W10S	4	0	6.05	38.27	0.103	1.146	0.570	0.0773	0.1075
281	BC24W10S	5	0	8.06	36.70	0.104	1.139	0.682	0.0963	0.1352
281	BC24W10S	6	0	10.0	36.74	0.103	1.163	0.809	0.1429	0.1498
281	BC24W10S	7	0	11.7	36.86	0.103	1.152	0.879	0.1869	0.1530
282	BC24W10S	1	0	0.04	3.104	0.103	1.159	0.555	0.0333	0.2169
282	BC24W10S	2	0	0.03	4.086	0.102	1.171	0.518	0.0375	0.1985
282	BC24W10S	3	0	0.02	6.119	0.103	1.160	0.452	0.0581	0.1374
282	BC24W10S	4	0	0.02	8.072	0.103	1.160	0.360	0.0664	0.0773
282	BC24W10S	5	0	0.01	10.07	0.103	1.157	0.286	0.0609	0.0383
282	BC24W10S	6	0	0.01	15.10	0.103	1.161	0.240	0.0599	0.0240
282	BC24W10S	7	0	0.00	25.10	0.103	1.162	0.223	0.0616	0.0219
283	BC24W10S	1	0	-0.0	3.064	0.050	4.927	-1.02	0.1362	0.5522
283	BC24W10S	2	0	0.32	4.120	0.050	4.927	-0.76	0.1332	0.4345
283	BC24W10S	3	0.4	0.00	6.085	0.050	4.937	-0.60	0.0840	0.2085
283	BC24W10S	4	0	0.01	8.099	0.050	4.917	-0.31	0.0622	0.1136
283	BC24W10S	5	0	0.00	10.11	0.050	4.936	-0.13	0.0766	0.0648
283	BC24W10S	6	0	0.00	15.13	0.050	4.942	0.070	0.0650	0.0287
283	BC24W10S	7	0	0.01	25.10	0.050	4.935	0.150	0.0391	0.0101
284	BC24W10S	1	0	-0.0	3.033	0.763	0.021	0.233	0.0408	-0.047
284	BC24W10S	2	0	-0.0	4.021	0.909	0.014	0.242	0.0405	-0.046
284	BC24W10S	3	0	-0.0	6.035	0.813	0.018	0.229	0.0401	-0.049
284	BC24W10S	4	0	-0.0	8.046	0.785	0.020	0.224	0.0421	-0.048
284	BC24W10S	5	0	-0.0	10.01	0.785	0.020	0.228	0.0415	-0.049
284	BC24W10S	6	1.2	-0.0	15.03	0.779	0.020	0.223	0.0428	-0.050
284	BC24W10S	7	2.8	-0.0	25.08	0.892	0.015	0.226	0.0412	-0.046

RUN #	CONFIG.	PT. #	Vb	ALPHA	h/de	Ve	CT	CL	CD	CM
285	BC24W10S	1	100	-0.0	3.038	0.868	0.016	0.231	0.0405	-0.048
285	BC24W10S	2	100.4	-0.0	3.046	1.053	0.011	0.234	0.0329	-0.049
285	BC24W10S	3	100.4	-0.0	4.023	0.810	0.018	0.225	0.0393	-0.051
285	BC24W10S	4	100	-0.0	6.051	0.943	0.013	0.227	0.0384	-0.051
285	BC24W10S	5	100.4	-0.0	8.028	0.966	0.013	0.229	0.0386	-0.050
285	BC24W10S	6	101.2	-0.0	10.04	0.957	0.013	0.227	0.0370	-0.050
285	BC24W10S	7	100.8	-0.0	15.08	0.789	0.019	0.215	0.0415	-0.052
285	BC24W10S	8	99.19	-0.0	25.01	0.771	0.020	0.211	0.0442	-0.049
286	BC24W10S	1	98.79	0.04	3.085	0.102	1.175	0.611	0.0313	0.2250
286	BC24W10S	2	98.39	0.04	4.073	0.102	1.176	0.593	0.0414	0.1900
286	BC24W10S	3	100	0.03	6.080	0.102	1.186	0.458	0.0637	0.1125
286	BC24W10S	4	100.4	0.02	8.103	0.102	1.181	0.329	0.0604	0.0521
286	BC24W10S	5	100.4	0.01	10.08	0.102	1.173	0.249	0.0673	0.0293
286	BC24W10S	6	99.60	0.01	15.08	0.102	1.187	0.222	0.0630	0.0214
286	BC24W10S	7	98.79	0.00	25.09	0.102	1.186	0.213	0.0625	0.0212
287	BC24W10S	1	48.39	0.01	3.064	0.049	5.096	0.026	0.0628	0.6726
287	BC24W10S	2	51.59	0.01	4.061	0.049	5.093	-0.02	0.0451	0.5246
287	BC24W10S	3	49.59	0.00	6.063	0.049	5.110	-0.16	0.0553	0.3079
287	BC24W10S	4	46.8	0.00	8.072	0.049	5.120	-0.03	0.0787	0.2067
287	BC24W10S	5	50.8	0.01	10.07	0.049	5.118	0.112	0.0733	0.1525
287	BC24W10S	6	51.2	0.00	15.07	0.049	5.132	0.123	0.0703	0.0444
287	BC24W10S	7	50.8	0.00	25.08	0.049	5.124	0.137	0.0451	0.0019
288	BC24W10	9	0	0.06	3.079	0.051	4.755	-0.54	0.0775	0.3743
288	BC24W10	10	0	0.07	4.128	0.051	4.746	-0.16	0.0951	0.4535
288	BC24W10	11	0	0.07	6.068	0.050	4.932	0.046	0.0333	0.3599
288	BC24W10	12	0	0.08	8.117	0.050	4.918	0.082	0.0294	0.2858
288	BC24W10	13	0	0.08	10.08	0.051	4.745	0.164	0.0651	0.2699
288	BC24W10	14	0	0.08	15.14	0.050	4.870	0.177	0.0526	0.1630
288	BC24W10	15	0.4	0.07	25.09	0.050	4.891	0.121	0.0697	0.0945
289	BC24W14	4	0	0.05	2.039	0.049	5.071	-2.54	0.0973	1.8651
289	BC24W14	5	0	0.06	3.087	0.048	5.306	-1.64	0.0589	0.9151
289	BC24W14	6	0	0.06	4.029	0.049	5.099	-1.09	0.1716	0.4530
289	BC24W14	7	0	0.07	6.052	0.049	5.099	-0.48	0.0972	0.2401
289	BC24W14	8	0	0.07	8.056	0.049	5.116	-0.43	0.0967	0.1000
289	BC24W14	9	0	0.07	10.08	0.050	4.928	-0.23	0.0944	0.0519
289	BC24W14	10	0	0.08	15.05	0.048	5.340	0.045	0.0740	0.0167
289	BC24W14	11	1.6	0.07	25.05	0.049	5.148	0.063	0.0782	-0.024